GUIDE TO THE

# FORD FILM COLLECTION

IN THE NATIONAL ARCHIVES



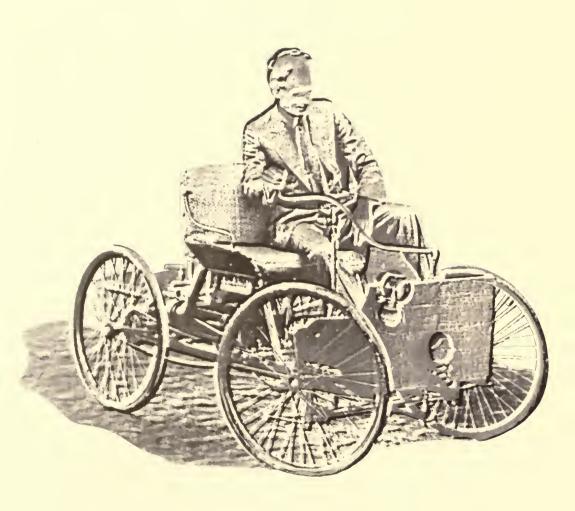
The film records described in this Guide are the 1,500,000 feet of motion pictures in the Ford Historical Film Collection which was presented to the National Archives in 1963 by the Ford Motor Co.

Henry Ford, because of his interest in the possibilities of the motion picture as an educational medium, and because of his awareness of its advertising potential, started a motion picture department in his company in 1914. The department concentrated mainly on current events and educational features from its beginning until the mid 1920's, when emphasis was shifted to promoting popular interest in modern farming methods, good roads, and traffic and industrial safety. Ford became one of the first producers of nonnewsreel educational films, and was, for many years, one of the largest film producers in the world. The outstanding historical value of the collection

From the collection of the



San Francisco, California 2006





# GUIDE TO THE FORD FILM COLLECTION IN THE NATIONAL ARCHIVES

RICHARD NIXON
PRESIDENT OF THE UNITED STATES

ROBERT L. KUNZIG
ADMINISTRATOR OF GENERAL SERVICES

JAMES B. RHOADS
ARCHIVIST OF THE UNITED STATES

End Paper: Henry Ford in his first car, built in 1896, Greenfield Village, Mich., 1927. Reel No. 200FC-2562(d).

# GUIDE TO THE FORD FILM COLLECTION IN THE NATIONAL ARCHIVES

by MAYFIELD BRAY

The National Archives
National Archives and Records Service
General Services Administration
Washington: 1970

National Archives Publication No. 70-6

Library of Congress Catalog Card No. 71-604432

#### **Foreword**

The National Archives and Records Service of the General Services Administration is responsible for administering the permanently valuable noncurrent records of the Federal Government and private papers offered as gifts that have permanent historical value to the American people. All holdings in the form of still photographs, sound recordings, and motion pictures are in the care of the Audiovisual Branch of the Cartographic and Audiovisual Records Division, except for significant collections of sound recordings and motion pictures to be found in the Presidential libraries. The National Archives has 35,000 sound recordings, 4.5 million photographic items, and 47,000 reels of motion picture film, and the collections continue to grow.

Most of the motion pictures were created by about 75 Federal agencies. Gifts of film received by the National

Archives from both private and commercial sources are numerous, however, and the total holdings provide an almost limitless variety of subject matter. The collections, dating from 1894 to the present, portray almost all human activities and natural phenomena that can be photographed, and they were made in every State of the Union, most major cities, and nearly every country of the world.

This guide has been prepared as a finding aid to facilitate the use of the Ford Historical Film Collection and to describe its contents.

ROBERT L. KUNZIG
Administrator of General Services



#### **Preface**

The film described in the guide consists of the 1.5 million feet of motion pictures in the Ford Historical Film Collection presented to the National Archives in 1963 by the Ford Motor Company. Given with the motion pictures was a grant to be used for copying them on safety-base film, for describing and cataloging their contents, and for publishing a guide. This guide describes the collection in terms of general subject headings, not individual scenes on particular reels.

The Ford Historical Film Collection constitutes a subgroup in Record Group 200, National Archives Gift Collection. The Ford collection is identified by the letters "FC" following the record group number. The reels and subjects are under archival control by symbols that were assigned to them as they were removed from the shelves of the film vault at the Ford Motor Company, Subject changes within reels are denoted by letters enclosed in parentheses. Illustrations contained in this guide are enlargements of individual frames of film. The reels from which they were taken are identified by the control symbols.

A card catalog of names of persons, events, places, processes, and the like, arranged in alphabetical order and referring to scene-by-scene reel descriptions, is available for use in the motion picture research room of the National Archives,

Although the user will find personal research the more satisfactory method of selecting footage, the staff can handle limited inquiries by mail and phone. All of the Ford film in the collection may be freely used, and reproductions of the film and of the reel descriptions may be purchased at reasonable prices. It is the responsibility of the user to determine the copyright status of non-Ford film and to obtain release before reproduction orders can be accepted.

The project of describing and cataloging the collection was planned and begun at the National Archives by Frank B. Evans and was completed by Mayfield Bray with the assistance of David L. Gallacher, John F. Pontius, Roberta J. Bogle, and Leona B. Miller. Dr. Evans and Leon A. Williams—both of the National Archives staff—and members of the staffs of the Ford Motor Company and the Henry Ford Museum and Greenfield Village, including Henry Edmunds, David T. Glick, and Frank R. Davis, read and commented on the manuscript.

JAMES B. RHOADS Archivist of the United States



### Contents

Introduction	1
PART I. EDUCATION, NEWS, AND SPECIAL SUBJECTS	
"Ford Animated Weekly," 1914–21	5
·	5
	5
	6
	6
	7
	7
Civics and Citizenship	
Industrial Geography—General 1	
Industrial Geography—Manufacturing	
Regional Geography—United States	
Regional Geography–Foreign	
History of the United States	
Nature Study	
Recreation and Sports	2
Sanitation and Health	
Technical	3
Special Subjects	4
"Ford News," 1934 3.	5
Prominent Individuals	5
Sports 3.	5
General News and Human Interest Items	6
Special Subjects, 1920-52	7
Agriculture and Conservation	7
Charity	7
Drama 38	3
Education	3
Geography	9
News 40	0
Sports and Recreation	I
Miscellany 42	2

x Contents

#### PART II. FORD FAMILY

Family Album	45
Funerals	46
Ford Family Philanthropies, 1916–54	47
Institutions Receiving Partial Support	47
Institutions Created by the Fords	47
Henry Ford Personal Projects, 1914-42	49
Dancing	49
Publishing	49
Farming	49
Henry Ford Museum and Greenfield Village	50
PART III. FORD MOTOR COMPANY	
Ford Motor Company-General, 1916-54	57
General Activities	57
History	58
Management Meetings and Reports	58
Domestic and Foreign Branches, 1928-54	61
Domestic Branches	61
Foreign Branches	61
Nonmanufacturing Activities, 1914–54	65
Contributory Industries	66
Dealer-Company Activities and Relations	69
Employee-Company Activities and Relations	70
Product Promotion	72
Safety Education	80
Plants, 1906–56	83
Airplane Plant	84
Highland Park Plant	84
Lincoln Plant	85
Mack Avenue Plant	85
River Rouge Plant	85
Suppliers	91
Tractor Plant	92
Village Industries	92
War-Related Manufacturing and Activities, 1917–19, 1941–45, 1953	93
World War I	93
World War II	94
Korean Action	97

Contents xi

#### PART IV. FILM FROM OTHER SOURCES

Cartoons, Comedies,															
Oocumentaries															
lews		 	 			 					 				
ersonal Films															
ropaganda		 	 			 									
ublic Service Featt	ires .	 	 	 		 		 		 	 	,			
echnical Features		 	 	 	 	 		 			 		. ,		
ravelogs		 	 			 				 	 				



#### Illustrations

#### End Paper

Henry Ford in his first car.

#### Preceding page 5

President Wilson; Helen Keller and Henry Ford; troops returning from the Mexican Border Punitive Expedition; sugarcane field; World War I Army trainees; fishing for sharks; harvesting ice; Santa Fe, N. Mex.; New York City; Kingston, Jamaica; Mexican presidential inauguration; and Luther Burbank.

#### Preceding page 45

Henry Ford; Henry Ford and John Burroughs; Will Rogers and Henry and Edsel Ford; Diego Rivera; Henry Ford and John Burroughs; and Henry Ford, President Hoover, and Thomas A. Edison.

#### Preceding page 57

Charles A. Lindbergh at Ford Airport; Ford coal mines; coagulating latex; lumbering in the north woods; launching the ore freighter *Henry Ford II*; a minstrel show; United Automobile Workers organizers at the River Rouge Plant; a 1906 Model-N Ford; test-driving a Model-T; Model-T stuck in the mud; racer 999; Model-A climbing Ben Nevis, Scotland; golden jubilee of the automobile; and Indians of Bolivia and Argentina.

#### Preceding page 83

Craneway at Highland Park Plant; final assembly line at Highland Park Plant; tapping the blast furnace at River Rouge Plant; casting motor blocks at the foundry of River Rouge Plant; unloading coal from a freighter, River Rouge Plant; pouring glass onto rolling table, Glassmere, Pa.; engine assembly line, River Rouge Plant; soaking pit, River Rouge Plant; bloom mill, River Rouge Plant; and stamping plant, River Rouge Plant.

#### Preceding page 93

Experimental one-man tank; submarine chaser (Eagle Boat) construction, River Rouge Plant; CG-4A glider; amphibious scout car demonstration; and B-24 Liberator bomber manufacturing, Willow Run Plant.

#### Preceding page 101

Scenes from a comedy produced by Thomas A. Edison, Mexican refugees in the United States, and Henry and Mrs. Ford with movie stars in Hollywood.



#### Introduction

Henry Ford, because of his interest in the possibilities of the motion picture as an educational medium and his awareness of its advertising potential, started a motion picture department in his company in 1914. The department concentrated mainly on current events and educational features from its beginning until the mid-1920's, when the emphasis was shifted to promoting popular interest in modern farming methods, good roads, and traffic and industrial safety. Ford became one of the first producers of non-newsreel educational film and was for many years one of the largest film producers in the world. Captions for many of the productions were translated, and the films were widely distributed abroad.

The collection's outstanding historical value for the period from 1914 to the early 1940's stems from its very broad subject-matter coverage. Almost every facet of the American scene is depicted, including cities, parks and recreational areas, agricultural and industrial processes, sports, important individuals, and news events. The evolution of all industrial processes related to automobile manufacturing is fully documented.

The collection has been arranged in four major parts. The first three contain film made by the Ford Motion Picture Laboratories and by other producers for the Ford Motor Company. Part IV contains film collected by Ford from other sources.

Part I, "Education, News, and Special Subjects," consists of four categories. The "Ford Animated Weekly," 1914-21, contains short news features, productions about cities, and items of general interest. The "Ford Educational Weekly" and "Ford Educational Library," 1916-25, consist of short features and unedited film on agriculture, civics and citizenship, industrial geography, regional geography, history, nature study, recreation and sports, sanitation and health. technical subjects, and special subjects. The "Ford News" is a series of newsreels shown for advertising purposes at Detroit area theaters during 1934. Film not part of these four categories, but of similar nature, has been described as special subjects and consists of material on agriculture and conservation, charity, drama, education, geography, news, and sports and recreation.

Part II, "Ford Family," consists of film portraying family activities in three areas. The personal interests, family, and social life of Mr. and Mrs. Henry Ford, 1916-45, and their funerals, are included in the chapter about the Ford family and friends. Some of the family's philanthropic interests, 1916-54, are shown, including activities of the Berry School at Rome, Ga., Camps Legion and Willow Run, the Detroit Institute of Arts, the Ford Foundation, and the Henry Ford Hospital. Film concerning the personal projects of Henry Ford shows

the Botsford Tavern, the *Dearborn Independent*, the Ford farm, and the Henry Ford Museum and Greenfield Village.

Part III, "Ford Motor Company," has been arranged under the following categories: general activities of the company, 1916-54; domestic and foreign branches, 1928-54; nonmanufacturing activities, 1914-54; plants, 1906-56, including the major manufacturing activities of the company; and war-related activities during both World Wars and the Korean Action.

Part IV, "Film From Other Sources," 1903-54, consists of film made by producers other than the Ford Motion Picture Laboratories and not produced for the Ford Motor Company. It includes advertisements for companies other than Ford, cartoons, early comedies, dramas, documentaries, news, personal films, propaganda, public service features, technical features, and travelogs.

Footage is not noted for the subject headings in chapters 1 and 3 since newsreels are covered in those chapters. A subject may appear briefly on more than one of the newsreels, and each newsreel covers several subjects. In other chapters footage is not repeated when it has been listed as part of a broad, general subject.

Abbreviations used in the descriptions of the film are:

ft.. feet ed.. edited uned., unedited mm..millimeter si., silent comp., composite, with sound track sound track only  $b\psi w$ .. black and white k., color min., minute mag., magnetic

# Part I EDUCATION, NEWS, AND SPECIAL SUBJECTS



President Woodrow Wilson at a baseball game, Washington, D.C., 1917. Reel No. 200FC-251(b).



Helen Keller with Henry Ford, Detroit, Mich., 1914. Reel No. 200FC-440(a).



Troops returning from the Mexican Border Punitive Expedition, Detroit, Mich., 1916. Reel No. 200FC-2564.



Sugarcane field in Louisiana, ca. 1922. Reel No. 200FC-547.



World War I Army trainees (probably at Fort Custer, Mich.), 1916. Reel No. 200FC-40(e).



Shark fishing off the coast of Florida, 1919. Reel No. 200FC-235(c).



Harvesting ice, Detroit, Mich., 1916. Reel No. 200FC-74(b).



Main Street, Santa Fe, N. Mex., 1916. Reel No. 200FC-4(d).



Looking up Riverside Drive from 94th Street, New York, N.Y., 1916. Reel No. 200FC-5(d).



Street scene, Kingston, Jamaica, 1920. Reel No. 200FC-349.



Outgoing President of Mexico, Adolpho de la Huerta (left), escorts President-elect Alvaro Obregón to the inaugural ceremonies, Mexico City, 1920. Reel No. 200FC-471.



Luther Burbank with his spineless cacti, Santa Rosa, Calif., 1917. Reel No. 200FC-2439.

### "Ford Animated Weekly," 1914-21

The "Ford Animated Weekly" is a series of 10- to 15-minute news features, filmed as they happened; several short productions about cities; and general interest items. The film was distributed free to theaters, schools, YMCA's, penal institutions, and the like. Filming of the "Ford Animated Weekly" was begun in 1914 and abandoned in 1921. The collection includes 9,345 feet of edited, 35 mm., silent, black and white film; 4,514 feet of unedited, 35 mm., silent, black and white film; and 218 feet of duplicate film.

# FEATURES ON CITIES BOSTON, MASS.

Public buildings, parks, and Revolutionary War monuments.

#### CHICAGO, ILL.

La Salle and Jackson Streets.

#### CONCORD, MASS.

Sites and monuments of the Revolutionary War.

#### DENVER, COLO.

Panorama of the city; and the public library, the capitol, and Lookout Mountain.

#### INDIANAPOLIS, IND.

Views of the city, the capitol, and Monument Place.

#### LEXINGTON, MASS.

Sites and monuments of the Revolutionary War.

#### DUBLIN, IRELAND

Features the Ballyrunion Railroad (monorail).

# PROMINENT INDIVIDUALS IN THE NEWS

# PRESIDENT WOODROW WILSON

Laying the cornerstone for the Arlington Memorial Amphitheater (1917).

In Detroit with Mrs. Wilson (Edith Bolling Galt) at the opening of a World Salesmanship Conference (1916), and with Gov. Woodbridge N. Ferris of Michigan and Henry Ford at the Ford Motor Company (1916).

In Indianapolis with Gov. Samuel M. Ralston of Indiana, Sen. Thomas Taggart of Indiana, Mayor Joseph E. Bell of Indianapolis, and Joseph P. Tumulty (1916); and in Monument Place with Mrs. Wilson (1919).

At his Long Branch, N.J., summer home with Mrs. Wilson and Sen. Ollie James of Kentucky, accepting the nomination for his second term (1916).

At a peace celebration (1918).

In Washington, D.C., at a Flag Day Parade with Mrs. Wilson and Franklin D. Roosevelt, Under Secretary of the Navy (1916); with Mrs. Wilson at an opening baseball game of the Washington Senators and at an exhibition game between St. Catherine's School and the Washington Senators (1917); reviewing the District of Columbia National Guard with Secretary of War Newton D. Baker (1917); and at the DAR Hall (1917).

#### **JOHN BURROUGHS**

Honored by Toledo school children at the unveiling of his statue in front of the Toledo Museum of Art (1918).

Planting a sugar maple tree at the Country Life Press building (1920).

# REPRESENTATIVE JOSEPH G. CANNON OF ILLINOIS

On the Capitol steps at Washington, D.C. (1917).

#### ADMIRAL GEORGE DEWEY

His funeral cortege from the Capitol to his tomb in Arlington Cemetery (1917).

#### THOMAS A. EDISON

Laying a plaque at the World's Fair, San Francisco (1915).

#### HENRY FORD

With Secretary of the Navy Josephus Daniels leaving the White House after a conference with the President (1916).

In conversation with Helen Keller (1914).

With a group of men in front of the *Detroit News* building.

At the controls of a big locomotive.

#### JAMES WHITCOMB RILEY

Outside his Indianapolis home (1916).

#### WILL ROGERS

Giving a rope-handling demonstration.

#### THEODORE ROOSEVELT

Making a speech at a Liberty Loan rally.

# DR. MARY WALKER, CIVIL WAR PHYSICIAN

In the lobby of the DAR Hall (1916).

#### WAR AND HOMEFRONT NEWS ITEMS

#### LIBERTY LOANS

Detroit celebration on going over

the top in the Third Liberty Loan campaign.

Rallies and parades.

#### U.S. TROOPS

Army training scenes.

An award presentation to a soldier and a sailor.

Canadian women and boy scouts welcoming American troops at a railroad station.

Michigan troops returning from the Mexican Border Punitive Expedition (1916).

#### WAR GARDEN

Being plowed by a tractor in the city-center lawn.

#### **TANKS**

Demonstration of a British military tank.

#### GENERAL INTEREST ITEMS

#### ATHLETIC EVENTS

Includes a football game, an ice hockey game, and two women's swimming events.

#### **ENTERTAINMENT**

Includes the Buffalo Bill Circus and a May Day celebration at Michigan State Normal.

#### RECREATIONAL ACTIVITIES

Includes facilities and activities at Belle Isle, Detroit, and Detroit Cross Country Riding Club; horse-drawn sleds; ice skating on a rink; and skiing.

#### FILLER ITEMS

Includes loading coal into the hold of a freighter, icemaking, roadbuilding, grapefruit growing, wild animals in a zoo, domestic animals, icebound ships, and a railroad accident.

# "Ford Educational Weekly" and "Ford Educational Library" 1916–25

The "Ford Educational Weekly" (1916-21) consists of short features and some unedited film not leading to finished productions about travel, industry, history, geography, and agriculture. It was intended to take the place of the "Ford Animated Weekly" and was distributed in the same manner. The "Ford Educational Library" (1920-25) evolved from the "Ford Educational Weekly" and is a group of educational films divided into the following categories: agriculture, civics and citizenship, industrial geography, regional geography, history, nature study, recreation and sports, sanitation and health, technical subjects, and special subjects. These films were sold to colleges, schools, churches, and the like, for the establishment of permanent libraries from which other institutions could rent prints. Published aids containing suggestions to the teacher, questions for the students, and bibliographies were circulated with the films. Because of the close relationship of these two series they have been combined for descriptive purposes. The collection contains 158,-083 feet of edited, 35 mm., silent, black and white film: 203 feet of edited, 16 mm., silent, black and white film; 81.208 feet of unedited, 35 mm., silent, black and white film; and 39,782 feet of 35 mm., duplicate film. Exceptions

only to 35 mm., silent, black and white film will be mentioned.

#### AGRICULTURE

#### APPLE RAISING

562 ft., ed. (1916); 135 ft., uned. (1919)

Apple orchard in bloom; spraying orchard; grafting trees; picking, sorting, and trucking apples; cider mill; making apple butter out of doors; and making pies in a commercial bakery.

#### BANANA RAISING

857 ft., ed. (1920, 1922)

Maps indicating banana-growing areas; and tropical scenery, clearing jungle land with machetes, plowing field, setting out plants, plantation and house, blossoms and bananas at different stages of growth, animated diagram of harvesting process, oxdrawn carts loaded with bananas, thatch huts in jungle, boat being loaded by women workers carrying bananas on their heads, banana boat under way, unloading bananas at New Orleans dock by machine, warehouse, and fruit vendor and customers on street.

#### BEEKEEPING

1,483 ft., ed. (1920, 1921); 1,252 ft., uned. (1920)

Bees swarming and gathering

honey; details of social and physical organization of swarm and bees in different stages of development; keeper removing honey from hive, straining honey out of doors, crating hives for winter storage, and uncrating hives in spring; and taking honey from wild beehive in hollow tree.

#### CATTLE RANCHING

2,249 ft., ed. (1919-22); 1,058 ft., uned. (1918, 1921)

Several ranches including Goodno Ranch, Fort Thompson Park, Labelle, Fla., and Bar-U Ranch, Calgary, Canada; ranch buildings; pastures and fields; open range; herds of cattle, sheep, and goats; range cattle in feed lot; cattle in stockyards pens; cowboys herding cattle on open range and into corrals; dipping cattle; cutting out, roping, tying, and branding calves; participating in rodeo events; and bighorn sheep, deer, buffalo, and coyotes.

#### DAIRY FARMING

1,378 ft., ed. (1921); 355 ft., uned. (1918, 1920)

Dairy farms and milk processing plants, different breeds of dairy cattle, cows in pasture and being driven in for milking, dairy barn and facilities, the care and milking of cows, refrigeration systems, the care and use of a cream separator, testing milk for butter fat content, pasteurizing milk, washing bottles, bottling by machinery, sampling and testing milk, churning by machinery, wrapping butter, and making and packing ice cream.

#### DATE GROWING

446 ft., ed. (1920); 266 ft., uned. (1920) Date palms growing in the desert; workers setting out new plants; cultivating; covering the unripened fruit with cloth bags; picking; trucking to the packing plant; and fumigating, sorting, and packing.

#### FARM ANIMALS

325 ft., ed. (1919); 842 ft., uned. (1919, 1920)

Children playing with puppies; domestic animals and fowls with their young, including dogs, rabbits, pigs, Shetland mare, geese, chickens, turkeys, cows, and sheep; and a few wild animals in a zoo, including bears, a fawn resting under a tree, and a kangaroo baby with its mother.

#### FARM BOYS ABROAD

534 ft., ed. (1920); 413 ft., uned. (1920)

Tour of America made by a group of farm boys from Texas: leaving by train; visiting farms in Kansas, Nebraska, and Iowa; touring the Chicago stockyards, the River Rouge Plant, Cornell University, New York City, Washington, D.C., and Natural Bridge, Va.; and at a picnic in Alabama.

# ELECTRICITY FOR THE FARM 838 ft., ed. (1919)

Contrasts life on the farm before and after electrification: pumping and carrying water, churning butter, washing and ironing clothes, sweeping floors, and operating a corn shelling machine by hand; installation of a Delco electric plant; portrays the same tasks performed by machinery; and contrasts lighting by kerosene lamps with lighting by electricity.

# FOOD FOR JAMAICA'S CITIES 685 ft., ed. (1921)

Native huts with a mountain range

in the background and goats grazing, natives and burros in village, blacksmith shop, natives carrying baskets on heads, and outdoor market place with produce.

#### IRRIGATION

441 ft., ed. (1922)

Desert scenes with views of giant cactus as a source of water, a horned toad, an ancient aqueduct and Indian women with pails of water; mountains with snow and small rushing streams; Roosevelt Dam; diagrams comparing the heights of Roosevelt Dam, the Eiffel Tower, Woolworth Building, Shoshone Dam, Arrowrock Dam, and the proposed dam on the Colorado River; a dam under construction; digging an irrigation ditch; ditch pattern in field; and irrigating an orchard.

#### MECHANIZED FARMING

914 ft., ed. (1919); 930 ft., uned. (1919, 1920)

Contrasts old-fashioned and modern farming techniques: binding grain by hand; horse-drawn binders; tractor-drawn and tractor-powered implements including plows, disk harrows, planters, threshing machines, and loaders; and wheat breeding and soil testing techniques.

#### OLIVE AND ORANGE GROWING 1,133 ft., ed. (1916, 1920); 191 ft., uned. (1920)

Map of the San Joaquin and Sacramento valley areas of California.

Sylmar Olive Grove; pruning trees and picking olives; pickers' camp in grove; cannery scenes including sorting and soaking olives in lye and brine solutions, packing in cans, and sterilizing; and crushing machinery and oil press. Orange grove; grafting and irrigating trees and picking oranges; and packinghouse processes including washing, sorting, wrapping, and crating oranges.

#### PHEASANT FARM

195 ft., uned. (1917)

Man feeding pheasants in a wooded field.

# POTATO HARVESTING AND STORING

388 ft., uned. (1923)

Workers harvesting potatoes, dumping them in piles, and covering them with straw.

#### POULTRY RAISING

771 ft., ed. (1920); 180 ft., uned. (1919, 1920)

Flocks of chickens in a farmyard, in a field, and in pens; technique for keeping records on egg production for individual hens; incubating and hatching eggs; chicks in brooder; feeding chickens; illustrations of bone structure and stages in molting for determination of laying ability; and care of roosts.

#### RICE GROWING, JAPAN

279 ft., ed. (1920)

Rice paddies with houses and mountains in the background; workers pulling, pruning, and transplanting seedlings; water buffalo-drawn plow and harrow in flooded paddy; and a Japanese couple eating rice with chopsticks.

# SUGARCANE GROWING AND PROCESSING

988 ft., ed. (1922, 1925); 149 ft., uned. (1922)

Sugarcane growing in Louisiana; tractor-drawn plows and trenching

implements; Negro workers planting cane sprouts in trenches; mule-drawn plow; workers, including children, hoeing field, chopping cane with machetes, and stacking cane and loading it onto ox-drawn carts; shipping; freighter at dock; unloading bags of raw sugar and taking samples from bags for testing; and refining and packing sugar.

# SUGAR FROM MAPLE TREES 624 ft., ed. (1922)

Grove of sugar maple trees, map of Eastern United States, tapping trees and collecting sap, boiling sap over an outdoor fire, and processing and packing sugar in a modern refinery.

#### WHEAT AND FLOUR

859 ft., ed. (1922)

Wheat field preparation, planting, harvesting by hand and with machinery, threshing by machine, trucking to elevator, grinding flour in waterpowered mill and in modern mill, and sacking flour by machinery.

#### CIVICS AND CITIZENSHIP

#### AMERICAN RED CROSS, WORLD WAR I

156 ft., ed. (1918); 314 ft., uned. (1917, 1918)

Work of the Red Cross at Newberry House, American Red Cross Teaching Center: attending patients and instructing the blind in handicrafts such as basketmaking, chair caning, and weaving.

#### **BOY SCOUT ACTIVITIES**

469 ft., ed. (1919); 1,886 ft., uned. (1919, 1920)

Scouts at attention for inspection, pledge of allegiance, and scout oath;

recreational activities such as hiking, setting up and breaking camp, swimming, sailing, and cooking over an open fire; contests including fire building, knot tying, gymnastics, and semaphore drills; and water rescue and first aid for people and animals.

#### "CENTURY OF PROGRESS"

985 ft., ed. (1921)

Development of modern transportation methods: horseback, covered wagon, and oxcart travel; truck and automobile traffic; railroad systems; steamships; and airplanes.

Development of use of electricity: washing by hand, commercial laundry operations using electric equipment, baking bread in an outdoor oven, a commercial bakery, hand shearing and spinning, machine spinning and weaving, a water-powered mill, and dams and powerhouses for generating electricity.

#### DETROIT, MICH.

601 ft., ed. (1921)

Detroit skyline and harbor area with excursion boat and freighters at dock, railroad station and crowds, traffic in center of city, public buildings, industrial areas, open air market, and people in parks.

#### GOOD ROADS PROMOTION

701 ft., ed. (1919); 905 ft., uned. (1917)

Indians and white men on foot in the forest; pioneers on horseback, with covered wagons, and with pack horses; cars and trucks on very bad country roads and on good paved ones; children walking on muddy road and on paved one; boy riding horse to post office for mail and mail delivery by truck to farm; horse and buggy transportation for the farm family; trucking produce to market; and city and country traffic.

#### INDIAN CAMP MEETING

653 ft., ed. (1920); 344 ft., uned. (1920)

Large group of American Indians at a religious camp meeting: tents, cars, horses, and buckboards; procession to church tent; camp activities; and church services and programs.

# INDUSTRIAL WORKING CONDITIONS

686 ft., ed. (1920)

Laborsaving machinery including automatic dishwashing machine, ice-cream-making machine, mining machinery and elevators, and a sawmill conveyor; and safety devices and clothing for the protection of workers and consumers.

#### LEAVENWORTH PRISON

529 ft., ed. (1919)

Prison building; cell blocks; prisoners being photographed, measured, and fingerprinted; prisoners at work in yard, shoeshop, tailorshop, barbershop, printshop, and on farm; classes in typing and drafting; and baseball game in prison yard.

# PATRIOTIC PARADES AND VICTORY CELEBRATIONS

711 ft., uned. (1916-18)

School, civic, and fraternal organizations parading and drilling; crowds celebrating victory in the streets; and children staging victory celebration at Belle Isle in Detroit.

#### SAFETY EDUCATION

#### **Accident Prevention**

1,848 ft., ed. (1918, 1919, 1921); 729 ft., uned. (1918-21)

Traffic accidents and near accidents between cars, between cars and pedestrians, between trucks and pedestrians, and between railroad trains and cars; and instruction in safe driving, walking, and playing habits.

#### Fire Prevention

1,747 ft., ed. (1921); 474 ft., uned. (1917, 1920, 1921)

Common careless acts resulting in fires, and firefighting techniques and training program of a modern firefighting organization.

#### SCHOOLS AND EDUCATION

#### "Democracy in Education"

1,679 ft., ed. (1922)

Brief history of the United States, statement of purposes of education, and classroom demonstrations on teaching penmanship at Wingert School, Detroit, using the Courtis Standard Practice Tests in Handwriting.

#### **Country School**

189 ft., uned. (1916)

Children arriving at a one-room country school in horse-drawn sleighs, classroom, boys climbing a tree and sliding off the ends of the branches, playground with no equipment, and children leaving school in sleighs and a car.

#### Modern School

419 ft., ed. (1923)

Facilities including library, swimming pool, printing press, woodworking shop, and dining room; classes in art, drafting, sewing, ceramics, and cooking; and orchestra and chorus practice.

#### School for the Deaf

741 ft., ed. (1920); 129 ft., uned. (1919) Classroom demonstrations in techniques for teaching deaf children to talk, read, and write.

#### **Vocational School**

467 ft., ed. (1920); 548 ft., uned. (1919, 1920)

School facilities such as dining hall, shops, and telephone switchboard; boys at work making their own uniforms and mending clothes, in barbershop, in hothouse, on lawn, in vegetable gardens, and in kitchen; boys participating in field events and baseball game, playing in band, dancing, and attending church; boys and girls dancing and in chemistry laboratory; and girls in cooking and sewing classes.

#### U.S. GOVERNMENT

Post Office Department and Bureau of Engraving and Printing 1,408 ft., ed. (1917, 1920, 1922); 97 ft., uned. (1919)

Functions of the Post Office Department, and printing postage stamps and engraving and printing Government bonds by the Bureau of Engraving and Printing.

#### Presidents of the United States

856 ft., ed. (1921); 53 ft., uned. (1916) Portraits of Presidents from George

Washington through Woodrow Wilson with brief historical sketch for each, and a portrait only of Warren G. Harding.

# World War I Mobilization 438 ft., ed. (1918, 1919)

Men and women factory workers, helmet and shoe manufacturing, ship launching, Liberty bond printing, soldiers marching, airplanes in flight and being assembled, Eddie Rickenbacker, and small military tanks being test-driven over rough field. Military Training, World War I 6,295 ft., ed. (1916-18); 1,846 ft., uned. (1916-19)

Army Officer Training: field exercises.

Basic Training: field exercises, moments of relaxation, classrooms and mess, and athletic contests.

Coast Guard: Life Saving Station No. 269, Muskegon, Mich.; lake vessel *Bay State*; and drills including boat, signal, patrol, surfboat, lifeboat in heavy weather, and rescue from sinking ship by using lifeline and breeches buoy and from drowning.

Navy: Great Lakes Naval Training Center buildings; recruits receiving uniforms and equipment, getting haircuts, having teeth examined, and learning how to wear uniform; messhall and galley; barracks and hammocks; field exercises; moments of relaxation; gunnery school; Sousa's band; John Philip and Mrs. Sousa; seaplane, a Curtis F-Boat World War I trainer; wireless station; billy goat mascot; boxing matches; sham battle; and swimming instruction.

#### Post World War I

Navy Dirigible "Los Angeles" 107 ft., uned. (1918)

Dirigible at a mooring tower.

Navy Vessel "S.P. 218" 100 ft., uned. (1919) Ship underway.

#### Ship Launchings 417 ft., ed. (1923)

Shipyard and launching of a merchant ship and a battleship.

#### Rehabilitation of Disabled Veterans 1,164 ft., ed. (1920); 727 ft., uned. (1919, 1920)

Disabled veterans arriving at Fort Sheridan, Mich., Rehabilitation Center; working at and being helped with occupational and physical therapy and gymnastic exercises; being fitted with prosthetic devices and braces; working at chair caning and basket weaving; receiving instruction in commercial art, penmanship, typing, telegraphy, jewelry making, pattern making, electrical wiring, metal machining, and automobile repairing; watching boxing match; playing in orchestra; and participating in a fire drill.

## INDUSTRIAL GEOGRAPHY— GENERAL

#### **COTTON MILLING**

2,189 ft., uned. (1920, 1922)

Cottonfield and plants in different stages of growth; machinery including cotton breakers and looms; milling processes including carding, spinning, and yarn washing and drying, fabric folding, pressing, and wrapping; bolts of finished cloth; and cottonseed press.

#### **FISHING**

## Oyster and Shrimp

766 ft., ed. (1922); 129 ft., uned. (1921)

Map of the Chesapeake Bay area; oyster boats under way and at dock, oystermen unloading baskets of oysters, and demonstration of shucking; map showing shrimp fishing waters; and shrimp boat and crew with shrimp and other fish on deck, workers removing catch from boat, shrimp pickers at work, and washing and packing shrimp and ice in barrels.

## Red Snapper and Grouper 710 ft., ed. (1919)

Fishing boat and crew using lines

to catch snapper and grouper in the Gulf of Mexico.

#### Salmon

1,358 ft., ed. (1919, 1922)

Different techniques used in salmon fishing, including use of gill net, purse seine, trap or pot net, and trolling; cannery scenes including machinery for dressing fish, slicing, packing, weighing, and capping; and tank of small salmon at hatchery.

#### Shark

496 ft., ed. (1919); 1,129 ft., uned. (1919, 1920)

Net fishing for sharks; hauling shark and other fish, including turtles and stingrays, aboard boat by block and tackle; tannery processes including fleshing, tanning, shaving, stretching, and pressing; and workers making articles from sharkskin.

### Sponge

761 ft., ed. (1921); 645 ft., uned. (1920)

Spongers in small dories off coast of Andros Island, Bahamas, looking through glassbottomed buckets into water and spearing the sponges with long poles; putting sponges on deck of sailboat; storing in kraals; and washing, cleaning, trimming, and baling sponges.

## HOTEL KITCHEN AND DINING ROOM

1,100 ft., ed. (1916)

Facilities of the Hotel Statler kitchen, and workers preparing and serving food to guests in dining room.

#### ICE HARVESTING

195 ft. (1916); 199 ft., uned. (1921)

Workers with horse-drawn scrapers and scorers on the ice and sawing ice into blocks and floating them to a conveyor into icehouse, and children playing in snow.

## IRON AND STEEL

1,798 ft., ed. (1920)

Iron processing, from the mine to manufactured steel: map of the Lake Superior region locating ore, different kinds of iron ore, ore freighters, cranes unloading freighters, animated diagram illustrating the charging of a blast furnace, smelting, pouring pig iron into molds, making steel in open hearth furnace, casting ingots, transporting ingots on flatcars to soaking pit, bloom mill scenes, map of Great Lakes region designating steel centers, and steel bridges and skyscrapers.

#### LAUNDRY

508 ft., ed. (1917)

Workers using washing machines, mangles, collar and cuff starching machines, dampening machines, sewing machines, collar humidifying and finishing machines, and shaping machines.

#### LUMBER

4,305 ft., ed. (1917, 1919, 1920, 1922); 1,049 ft., uned. (1919)

Map of United States indicating the Northern, Hardwood, Southern, Rocky Mountain, and Pacific Forests; logging camps in snow-covered forests; loggers felling trees and cutting logs into lengths; snaking logs with a cable and donkey engine, with horses, and with horse-drawn two-wheeled carts; horse-drawn and tractor-drawn sleds moving logs on skidways; loading logs onto flatcars by block and tackle; floating logs to the boom in mountain streams and

rivers and breaking log jams; preparing skidway; log booms and conveyors into sawmills; sawmill scenes; sorting, drying, and stacking lumber; shipping lumber by trailer, freighter, and railroad; lumberyards; constructing and launching ships; prefabricating homes; and making furniture.

#### MEAT PACKING

2,800 ft., ed. (1919, 1922)

Cattle on the open range and in feed lots; pigs in farmyard; cattle. pigs, and sheep in the Chicago stockyards, and buyers walking fences; beefbutchering scenes including splitting and scrubbing the carcasses; inspecting, chilling, cutting, and trimming meat; chart showing different cuts of beef; pork butchering including splitting carcasses; cutting and trimming meat; salting down hams; making and smoking sausage; shipping meat refrigerated boxcars; canning meat; and byproducts including upholstery stuffing and rope from hair, fertilizer from blood and bone, comb and pipe and other objects from horn, candle and lard from tallow, leather from hides, glue from hooves, and butterine from oil.

#### MINING COAL

1,732 ft., ed. (1916, 1921, 1922); 215 ft., uned. (1920)

Map showing locations of bituminous and anthracite coal deposits in United States; miners using manual methods to mine and load coal into cars; blasting coal face; coal cars and miners moved by elevator; muledrawn coal cars; diagram of mine, showing shaft and entries into coal beds; mine-building scenes including breakers with boys washing and sort-

ing coal by hand, cranes and a culm dump, and machinery for grading; shipping coal by railroad and freighters; strip mine; mining towns; and mine safety education programs including first aid methods and training sessions, a simulated explosion, a worker nailing up a curtain to seal off smoke and gas in mine area where he is trapped, and rescue operations.

#### NEWSPAPER PUBLISHING

905 ft., ed. (1918, 1919)

Editorial department; a linotype operator; workers making matrixes, casting cylindrical plates, and attaching plates to press; presses; cutting, folding, and counting papers by machine; workers tying bundles of papers and loading them into truck; newsboys boxing on street and policeman refereeing; and girls taking ads over phones.

#### SALT INDUSTRY

750 ft., ed. (1919, 1923); 49 ft., uned. (1920)

Salt industry of the Bahama Islands: beach scenes; evaporation reservoir; piles of salt; natives moving, bagging, and carrying salt and loading it onto lighters; schooners standing offshore; underground mining including use of bucket elevator in the mine, drilling, setting a charge, and shoveling salt into mine cars manually and with electric shovels; crusher; machine for screening; steam shovel loading railroad cars with salt; and workers packaging salt.

## STONE QUARRY

650 ft., ed. (1919)

Quarrying operations at Stone

Mountain, Ga., including blasting, drilling blocks of granite with hand tools, shaping paving blocks, and loading stone onto flatcar with block and tackle; pillar of granite in polishing machine; workers using pneumatic hammer and polisher, working on tombstone, and treating and polishing stones; and Museum of Natural History of the Smithsonian Institution at Washington, D.C., under construction.

#### SUGAR REFINING

766 ft., ed. (1919)

Growing sugarcane in Hawaii, including plowing; and cutting, stacking, and placing cane in flume to refinery.

Tapping maple tree; collecting sap and boiling it in large kettles over an open fire; and refining maple sugar in a modern refinery with large evaporation vats, straining filters, bottling machinery, and mixers for making loaf sugar.

#### TOBACCO DRYING

109 ft., uned. (1919)

Workers hanging racks of tobacco leaves in drying shed.

#### WOOLEN MILLING

420 ft., ed. (1918)

Shearing sheep; woolen mill and river; unpacking baled wool; sorting, grading, and washing wool by machinery; dusting, lapping, and carding by machinery; mixing cotton and wool; spinning and knitting by machinery; washing fabric; and cutting and sewing garments, making buttonholes, pressing garments, and sewing on buttons.

## INDUSTRIAL GEOGRAPHY— MANUFACTURING

#### BAKING POWDER

411 ft., ed. (1920)

Ingredients used in baking powder, mixing machine, testing laboratory, packing machinery, woman worker labeling cans, and load of cans being placed in drier.

#### BARRELS

693 ft., ed. (1919)

Loggers felling and cutting oak tree for barrel staves; workers cutting, trimming, and shaping staves; drying staves in open and in kiln; making barrel ends; planing and beveling staves; assembling barrels; placing and setting hoops; machinery resetting hoops after drying and after planing; hoopmaking machine; gluing and painting barrels by machinery; and shipping barrels by railroad.

#### **BEEHIVES**

605 ft., uned. (1919, 1920)

Workers using machinery to saw, sand, shape, and plane wood for beehives and honeycomb frames; and asembling hives.

#### CANDY

471 ft., ed. (1921); 282 ft., uned. (1920) Candy factory, machine- and handdipping chocolates, boxing candy, cutting candy, making hard candy, and making fancy candy baskets.

#### CARBORUNDUM WHEELS

405 ft., ed. (1919)

Carborundum being crushed by machine and crushed grains being sorted by screening, clay and carborundum in revolving mixing barrel, machinery for molding and pressing, hand-packing molds, drying carborundum wheels in a kiln, machinery for testing finished wheels, and carborundum wheels in use.

#### CARPETS

735 ft., ed. (1920)

Wilton rug manufacturing processes: winding and twisting yarn by machine, starching the warp, and drying it in a steam roller; winding the cop for the shuttle; designing the pattern; working the design into the Jacquard; weaving on the loom; inspecting the rug; cutting the pile; sewing strips of carpet together; stretching and ironing; and sewing on fringe.

#### CHEWING GUM

620 ft., ed. (1920); 127 ft., uned. (1920)

Chewing gum manufacturing processes: grinding, filtering, and steaming chicle; mixing and kneading gum ingredients by machine; rolling, cutting, and wrapping gum by machine; candy-coating gum in revolving barrel; and boxing by automatic machine.

#### **CLOCKS AND WATCHES**

830 ft., ed. (1920)

Clock and watch manufacturing processes: making parts and assembling and testing watches and clocks.

#### **CLOTHING**

#### **Gloves**

671 ft., ed. (1919)

Kid glovemaking processes: stretching leather; cutting out the pieces with hand die and by machine; and women workers machine-sewing gloves, inspecting and lining gloves,

making cuffs for gauntlets, pressing and polishing gloves, attaching snap fasteners to the cuffs, and inspecting and pairing finished gloves.

#### Men's Suits

714 ft., ed. (1920); 284 ft., uned. (1920)

Men's suit tailoring: testing, shrinking, and drying fabric; cutting many layers of fabric at one time with electric cutter; and men and women workers making trousers and coats.

## Women's Silk Hosiery

360 ft., ed. (1920)

Silk hosiery manufacturing: spinning thread from raw silk; knitting and seaming by machine; and inspecting, pressing, and packaging stockings.

#### CURTAINS

539 ft., ed. (1917 or 1918)

Lace curtainmaking machinery and processes: bobbin threading and winding machinery; loom and Jacquard; removing lace from the roller; inspecting and mending lace; trimming off selvages, scalloping edges, and overlocking lace; washing and bleaching; starching, stretching, and ironing curtains; and folding and pairing finished curtains.

#### ELECTRIC APPLIANCES

### Irons

195 ft., ed. (1920)

Workers making and nickel-plating shoes for electric irons, assembling elements, fitting element to shoe, and attaching cover and handle.

#### Light Bulbs

168 ft., ed. (1919)

Women workers assembling light bulbs.

#### Percolators

214 ft., ed. (1925)

Wipe-tinning metal plates; presses stamping out shapes; workers refining them on a lathe; and assembling, soldering, buffing, and testing percolators.

#### FURNITURE

765 ft., ed. (1920); 78 ft., uned. (1920)

Wicker furnituremaking processes: sorting, washing, and bleaching reed; women workers splicing and gluing strips of cane together; steaming and shaping wood for frames in presses; making seat frames; assembling furniture frames; weaving furniture by hand and by machine; singeing shreds from finished furniture; and spray painting, upholstering, and packing it.

#### **GLASS CUTTING**

283 ft., ed. (1919)

Worker roughing in the designs on glassware with steel wheels and finishing cutting with stone wheels; polishing, treating with acid, and washing finished pieces; and etching and engraving goblets.

#### HOUSES

806 ft., ed. (1919); 474 ft., uned. (1919)

Prefabricated house manufacturing: young couple engaged to be married looking for a home and deciding to buy a prefabricated one; plant including drafting room and office; lumberyard; sawmill; electric tools used to sand, cut, mill, drill, and glue various parts of the house; packing parts; construction site and house going up; and Dutch colonial style frame house.

#### LEATHER

955 ft., ed. (1923)

Preparation of hides for tanning,

including skinning animal, salting flesh side for storing, soaking and softening hides, trimming, treating with lime water to soften hair, and removing hair by machine and with hand tools; tanning processes including soaking the hides in tan liquor in revolving drum and squeezing the liquor out of hide with large rollers; ironing tanned hides; splitting leather by machine; shaving sole leather by machine; and dyeing, oiling, and hardening leather.

#### **MACARONI**

313 ft., ed. (1920 or 1921)

Macaroni dough being mixed and kneaded by machinery and forced through a press past air blowers, macaroni on racks in the drying room, power saw being used to cut macaroni, and women workers packing macaroni.

#### PAPER

1,100 ft., ed. (1919 or 1920); 1,289 ft., uned. (1919)

Paper manufacturing processes: preparing rags and wood; bleaching and draining fibres; beating fibres to fine pulp; spreading wet pulp and draining water from it on Fourdrinier machines; drying and pressing paper in rolling machinery; applying finishes; cutting, sorting, trimming, and counting finished paper; making envelopes by machine; making book covers by machine; making cardboard in a press; and packaging stationery.

#### **PENS**

523 ft., ed. (1920)

Rubber refining processes; rubber tubing coming from machine; cutting tubing into pen case lengths; turning, polishing, engraving, and slitting barrels; tapping thread and drilling vent and clip-holes in cap; assembling cap and clip; cutting, painting, shaping, and notching channel feed; and assembling and inspecting fountain pens.

#### POTTERY

1,632 ft., ed. (1916, 1919); 216 ft., uned. (1922)

Preparing clay; potters shaping bowls, plates, and platters on potter's wheels, sometimes using molds and sometimes by hand; casting porcelain pitcher in mold; applying decorations to moist pieces; loading kilns; and inspecting, glazing, and decorating pottery.

#### RINGS

120 ft., uned. (1919)

Men's signet ring manufacturing processes from stamping out of shapes to the finished product.

#### SAWS

485 ft., ed. (1920)

Rolling steel in a press, cutting sheets of steel into saw blades and cutting teeth by machine, hardening and tempering blades, setting replaceable teeth in a circular saw, beveling and brazing ends of a bandsaw together, and making saw handles from apple wood and fixing them to blades.

#### SHOES

517 ft., ed. (1917)

Processes in the manufacturing of army shoes: preparing leather, cutting pieces by machine die, perforating by machine, skiving by machine, making linings, sewing uppers together, putting in hooks and eyes by machine, and making and assembling uppers to insoles and soles to shoes.

#### SILVERWARE

1,760 ft., ed. (1920); 551 ft., uned. (1920)

Silverware manufacturing processes: shaping metal in presses and over forms on lathes; cutting openwork designs by saw and by punch press; stamping patterns on flatware handles; drop-forging knife handles; soldering handles together and onto blades and other objects; electroplating finished objects; polishing, burnishing, and engraving finished objects including bowls, dishes, baskets, urns, casseroles, trays, and flatware; and inspecting, wrapping, and packing silverware.

#### SOAP

730 ft., ed. (1919); 56 ft., uned. (1916)

Manufacturing processes for toilet soap and laundry soap: boiling soap mixture in large vats, drying stock by machine, grinding solid soap, mixing perfume with soap chips, mixing and kneading soap by machine, forming bars in presses, cutting cakes, machine-stamping brand name on cakes, and wrapping by machine and by hand.

Packing cold cream and face powder.

## SPORTS EQUIPMENT

722 ft., ed. (1920)

Several processes in the manufacturing of footballs, boxing gloves, baseball gloves, and baseballs.

#### STEEL

143 ft., ed. (1919); 340 ft., uned. (1920)

Steel mills; cranes unloading ship; molten steel flowing from furnaces; and steel being trimmed, stamped, pressed, punched, buffed, and drilled.

## THERMOS BOTTLES

513 ft., uned. (1920)

Workers shaping and polishing thermos bottle liners, turning metal outer bottles, assembling bottles and liners, and sealing vacuum liners.

#### TIRES

822 ft., ed. (1922); 120 ft., uned. (1920)

Map indicating the rubber producing areas of the world; Ceylonese rubber plantation; rubber refining processes; several processes in making inner tubes; several processes in making rubber tires, including rubberizing cotton for the casings, forming the tires on molds, shaping the tires in hydraulic presses, vulcanizing tires, and inspecting them; and testing tires by bouncing them off a metal cleat.

#### **TOYS**

740 ft., ed. (1920); 197 ft., uned. (1920)

Toy factory and making toy pianos, dolls, wooden animals for toy circus, and a doll house; and a fantasy in which dolls and toy circus animals and a clown come to life and perform.

#### UKULELE

54 ft., ed. (1917); 196 ft., uned. (1917) Worker making ukulele by hand, showing several stages.

#### WALLPAPER

469 ft., ed. (1918)

Wallpapermaking processes: printing by hand and machine, mixing dyes and sizing, designing patterns, and hand-carving printing rollers.

#### WHEELS

1,122 ft., ed. (1918, 1919)

Processes in making wheels for automobiles: several stages in manufacturing spokes and wooden rims and their assembly; fitting steel tires to the wooden rims; attaching hubs to the wheels; and sanding, filing, and painting finished wheels.

#### WIRE

130 ft., uned. (1919)

Workers guiding wire around revolving drums and inspecting wire.

## REGIONAL GEOGRAPHY— UNITED STATES

#### GENERAL

The Great Lakes 924 ft., ed. (1925)

Map of the Great Lakes area and the connecting waterways; Lake Superior and scenes of Picture Rocks, Isle Royale, ships underway, beaver working, a copper mine and refining plant on the Keweenaw Peninsula, an iron mine, and a city waterfront with several grain elevators; the Soo Canals with ships going through locks; Lake Huron and Mackinac Island and the blockhouse, Arch Rock, and Sugar Loaf; Lake Michigan and the Chicago skyline, the Detroit skyline, a large ferry breaking ice on the Detroit River, and a shipyard and the building and launching of a freighter; Lake Erie and aerial views of Toledo and of loading and unloading a ship at Cleveland; the Niagara River and Falls in summer and in winter; and the Welland Canal and the St. Lawrence River.

## Rocky Mountains

2,509 ft., ed. (1917, 1920, 1922); 193 ft., uned. (1917)

Mountains, valleys, canyons, streams, waterfalls, lakes, and forests; tourists at lodges and camping; animals of

the Rocky Mountains, including buffalo, caribou, elk, deer, black bear, porcupine, and beaver; baby eagle in a nest; a miner panning for gold; Grand Canyon of the Colorado River; Spanish Peaks of the Sangre de Cristo Range; and map of Montana, Idaho, Wyoming, Utah, Colorado, and New Mexico. Areas visited are described in detail under the individual States. Separable footage is described under each State.

## Southwest United States

1,438 ft., uned. (1920)

Views in Arizona, Arkansas, Colorado, Louisiana, and New Mexico, all described in detail under the individual States.

#### ARIZONA

#### General

2,053 ft., ed. (1916, 1917, 1920); 3,448 ft., uned. (1920)

Many mountain scenes with canyons, waterfalls, rivers, mesas, and buttes; desert and plants including several kinds of cactus and blossoms, yucca in bloom, piñon pines, and creosote bushes; rattlesnakes and horned toads; prairie and a herd of buffalo; and petrified forests.

Spanish ruins.

Cliff dwellings with an Indian climbing out of kiva by ladder, and rocks with Indian paintings on them.

Roosevelt Dam and the lake, irrigation ditches and powerlines, and Elephant Butte Dam, N. Mex.

Street in Phoenix, the capitol, and a swimming pool.

A brick kiln at Mimia on the Apache Trail, and an old mining town and copper mine operations.

The town of Globe.

Prescott and area; and Frontier

Days celebration at Prescott, including a chariot race, parade, and rodeo events such as calf roping and tying, bull riding, bulldogging steers, bronc riding, horseracing, and trick riding.

Railway station and an adobe building at Seligman; and adjacent countryside, including cattle and horses on open range, and a hotel and swimming pool in desert.

Large cathedral in Tucson, and the ruins of Xavier Mission.

Miners panning for gold.

Indians dancing and posing, and men making adobe brick.

Highway construction including scenes of blasting and of horse-drawn equipment.

# Grand Canyon of the Colorado River 1,192 ft., ed. (1916, 1920); 386 ft., uned. (1920)

Map indicating the Colorado River Plateau, diagram illustrating rock layers and stages of the cutting of the canyon, tourists on horseback descending into the canyon, and the canyon and the Colorado River from above and from inside the canyon.

#### ARKANSAS

537 ft., ed. (1919)

The town of Eureka Springs and the surrounding Ozark Mountains, including the springs; panoramas of the town and Crescent College for girls; girls on horseback and picnicking on a mountain; and recreation facilities at Spring Lake.

Blue Springs and the surrounding countryside.

Street scenes at Little Rock and the rock from which the city got its name.

A resort area with a large hotel and bathhouses.

Horseback riders on wooded trails. A valley and farms surrounded by

wooded hills, and the countryside taken at different seasons of the year.

A road gang made up of Negro prisoners.

#### **CALIFORNIA**

Los Angeles

1,726 ft., ed. (1916, 1917); 113 ft., uned. (1920)

Panorama of the city, Hall of Records and Court House, Broadway, Clunes Auditorium, Central Park, retail district, Angels Flight Inclined Railway and Third Street Tunnel, University of California, California Hospital, Chinatown, Old Plaza and the original Mexican Pueblo of Los Angeles, Plaza Church, North Hill Street and Double Barrelled Tunnel, Scottish Rite Temple, Seventh and Broadway, Hollenbeck Park, Westlake Park, pipe carrying water supply, residential area, oilfield and derricks, and a roadbuilding operation.

#### Missions

503 ft., ed. (1917)

Missions along El Camino Real, including Old Town San Diego, San Luis Rey, San Juan Capistrano, San Gabriel, Santa Barbara, La Purisima Concepción, and San Antonio de Padua.

## Mount Lowe, Sierra Madre Range 538 ft., ed. (1917)

Tourists on trip up Mount Lowe, going the first part of the trip by train and streetcar and hiking the rest of the way; views of the surrounding mountains; and hikers, among whom are women wearing long skirts.

#### Mount Wilson

640 ft., ed. (1917)

Tourists riding mules up mountain

trail; scenes along the way, including a valley below, snow-covered mountains, and forests; and the observatory.

#### Sacramento

102 ft., uned. (1922)

The city from different vantage points, monuments, a square, a domed building, traffic, and tourists looking at the city from a lodge on a high hill.

#### San Diego

400 ft., uned. (1919)

Panorama of business district, tourists on sightseeing tour, rocky coast-line, racetrack and horserace, and a country road.

#### San Francisco

376 ft., ed. (1916)

Nob Hill summit, California Street hill, Hall of Justice, end of the Lincoln Highway, residential area, Chinatown, Golden Gate Park, General Grant Statue, Monument to Francis Scott Key, U.S. Sub-Treasury, U.S. Courthouse and Post Office, new auditorium, Stevenson Monument, Masonic Temple, Soldiers Monument, public library, City Hall, Japanese Garden in Golden Gate Park, and the city at night.

### Santa Catalina Island

906 ft., ed. (1917); 481 ft., uned. (1920)

Map of the island showing its relationship to the California coast; tourists boarding a ship; Los Angeles harbor and waterfront; the breakwater with a lighthouse at the end; steamship docking at Avalon, Santa Catalina, and passengers disembarking; shoreline and caves from the water; an old Chinese junk; many seals on the rocks near the island; plantlife and a swimmer as seen through the

glass bottom of a boat; and people riding surfboards being towed by motorboats.

## Santa Clara Valley and San Jose 1,044 ft., ed. (1921)

Map of Santa Clara County; San Jose including a residential area, business district, traffic, San Jose High School, San Jose State Teachers College, several churches, and Edwin Markham in front of his home; landmarks and points of interest nearby, including the University of Santa Clara, Stanford University, Mission Santa Clara, Mission San Jose, and Mission San Juan Bautista; blossom festival; orchards and workers; and cannery scenes.

## Sierra Nevada Mountains

551 ft., uned. (1920)

Valleys, lakes, mountains, natural bridge, rock formations, streams, cliffs, and canyons; snaking a huge log slung under a two-wheeled cart; mountain meadows, snowcapped mountains, and mine structures; Trojan Pass; deep gorge and waterfalls; and timberline and snowbanks.

#### Yosemite Valley

799 ft., ed. (1917, 1920); 1,179 ft., uned. (1917, 1920)

Diagrams and maps illustrating the formation of Yosemite Valley by glacial action; the valley including El Capitan, Bridal Veil Falls, Cathedral Spires, the Falls of the Yosemite, North Dome, Glacier Point, the village of Yosemite, Tenaya Canyon, Half Dome, Cloud's Rest, Washington's Column, Mirror Lake, Vernal Falls, Nevada Falls, and Liberty Cap; and tourists on horseback, in cars, around campfires, and on lookout points.

#### **COLORADO**

893 ft., ed. (1916, 1917); 196 ft., uned. (1921)

Plains, foothills, and mountains near Colorado Springs: Pikes Peak and the cog railroad; the Garden of the Gods; the Park of the Red Rocks; the Pillars of Hercules at the mouth of Cheyenne Canyon; and Seven Falls in Cheyenne Canyon.

Horseshoe Falls at Estes Park and the Continental Divide from Estes Park.

The Royal Gorge of the Arkansas River and the railroad running through it.

Poncho Pass.

The capitol at Denver.

Several animals including chipmunks, elk, burros, deer, black bear, porcupine, skunk, and beaver; and an eagle in its nest.

A miner panning for gold. An irrigation dam.

#### **FLORIDA**

2,980 ft., ed. (1917, 1920, 1921); 1,475 ft., uned. (1919, 1920)

Tropical scenery: swamps, a grove of mangrove trees, live oaks with Spanish moss hanging from them, hibiscus flowers, sea grapes, Spanish bayonet, several varieties of palm and pine trees, and whooping cranes.

Jacksonville: business district, waterfront, residential section, Panama Park, a beach, and the shipyard.

St. Augustine: a Spanish monument, the old market, Memorial Presbyterian Church, the Cathedral, the garden of the Ponce de Leon Hotel, the gardens of the Alcazar, and the ruins of an old fortress.

Seminole Indians, the swamps and islands on which they live, and their

homes and way of life; and the wildlife of the area, including alligators.

Silver Springs, the river flowing from the springs, and the surrounding countryside.

#### **GEORGIA**

427 ft., ed. (1917)

Atlanta: business district, the Post Office and U.S. Customs building, the State capitol, the Terminal Station, a residential area, cotton warehouses, Grant Park, East Lake Club House and golf course, Agnes Scott College for girls, Fort McPherson, a Confederate soldiers' home, Marietta National Cemetery, Bobby Burns Cottage, and the Federal prison and a cell block.

#### ILLINOIS

98 ft., uned. (1920) Chicago waterfront.

#### LOUISIANA

2,046 ft., ed. (1917, 1923); 1,178 ft., uned. (1920-22)

New Orleans: residential and business districts; Royal, St. Charles, and Canal Streets; Exchange Alley; Lee Circle; Jackson Square; the old French market; the old Cabildo; Bayou St. John; ruins of the Spanish Fort; Metarie Cemetery; St. Louis Cathedral and cemetery; the home of Jean Lafitte; General Benjamin Franklin Butler's headquarters; the French Quarter; several statues and monuments; City Park; the New Orleans Cotton Exchange; levees; the waterfront and Mississippi River; and Mardi Gras celebration scenes.

An old mansion in a grove of trees.

#### MARYLAND

693 ft., ed. (1921)

Map of the Cheasapeake Bay area.

Baltimore: waterfront; Baltimore, Howard, and Eutaw Streets; City Hall; Pennsylvania Union and Mount Royal Stations; the Academy of Music and Baltimore College buildings; Courthouse; industrial area; several statues and monuments; Lexington Market; Fort McHenry; and oyster boats with fishermen unloading oysters at the dock and giving shucking demonstrations.

#### **MASSACHUSETTS**

327 ft., ed. (1917, 1918)

Boston: business district, Boston Common, Beacon Hill, Granary Burying Ground, Monument Square, New Old South Church, Forsyth Dental Infirmary, Notre Dame Academy, State Armory, Faneuil Hall Market, port and harbor, Poet's Corner, Opera House, Symphony Hall, and First Church.

Cambridge: Old North Bridge, monument to Capt. John Parker, and the Washington Elm.

#### **MICHIGAN**

569 ft., ed. (1921); 483 ft., uned. (1921) Detroit: railroad station, business district, several public buildings, industrial areas, outdoor market, crowds at parks, and excursion boat leaving pier.

#### **MINNESOTA**

1,269 ft., ed. (1917)

Minneapolis: business district, residential area, First Church of Christ Scientist, Congregational Church, Minneapolis Boat Club, Pro-Cathedral of St. Mary, Lake Calhoun, First Presbyterian Church, Minneapolis Athletic Club, several statues and monuments, Minnesota Soldiers Home, Minneapolis Institute of Arts,

park scenes, and the University of Minnesota campus.

St. Paul: State capitol; Harriet Island; railroad yards; Fort Snelling; ice formations on Minnehaha Falls; and a winter festival including a parade, christening a totem pole, sulky race on ice, ice-skating exhibitions, autosled races, tobogganing, ski jumping event, and dogsled race.

#### MISSOURI

280 ft., uned. (1916, 1917)

An excursion boat trip up a river to Lake Taney Como and the country-side.

The business district of Joplin.

#### **MONTANA**

Glacier National Park.

#### **NEW JERSEY**

1,163 ft., ed. (1917, 1919)

Atlantic City: hotels and beaches, the boardwalk, and tourists.

#### **NEW MEXICO**

264 ft., ed. (1916); 301 ft., uned. (1916)

Santa Fe: Main Street, the Executive Mansion, the capitol, Cathedral of the Scottish Rite Masons, a park, burros loaded with wood, and the U.S. Indian Industrial Training School.

The Indian village of Tesuque and Indians dancing and posing.

Ruins of cliff dwellings in Frijoles Canyon, countryside, mountains, canyons, and rock formations.

#### **NEW YORK**

3,871 ft., ed. (1916-21); 3,716 ft., uned. (1917-20, 1925)

New York City: views from an elevated railroad, including the Hudson River and Riverside Drive from 130th Street, Riverside Drive from 94th Street, Metropolitan Museum of Art, American Museum of Natural History. Broadway from 69th Street, Herald Square, Battery Park and the Aquarium, Lower Broadway, and Washington Arch; skyline from several angles; the harbor and bridges; points of interest including the Statue of Liberty, Grant's Tomb, Brooklyn Bridge, the Post Office on Eighth Avenue, the public library, Woolworth Building, Manhattan Bridge, Williamsburg Bridge, and Queensboro Bridge; New York City, Yonkers, and the palisades from an excursion boat on the Hudson River; and Coney Island including crowds in a concessionlined street, amusement park rides, and beach.

Niagara Falls and River in summer and winter.

#### OHIO

353 ft., ed. (1916)

Cleveland: business district, Euclid Avenue, Public Square, a statue, several public buildings, Rocky Bridge, Rockefeller Park, and the Garfield Memorial Mausoleum.

Toledo: waterfront, industrial district, Madison Street, and a coal freighter.

#### **OREGON**

1,054 ft., ed. (1918, 1920)

Portland: Washington Street, Broadway, the Multnomah Athletic Club, a railway bridge, a residential area, Washington Park, Lewis and Clark Monument, other monuments and statues, U.S. Custom House, State capitol and grounds, the Arlington Club, a public market, Willamette River harbor facilities, and Rose Carnival parade.

Mt. Hood: a Ford car climbing the mountain through deep snow, and hikers.

#### **PENNSYLVANIA**

576 ft., ed. (1916, 1917)

Philadelphia: streets and traffic, the U.S. Post Office, statues and monuments, seals feeding at the aquarium, Pennsylvania Academy of Fine Arts, City Hall Plaza, City Hall Tower, Metropolitan Opera House, and Broad Street.

Pittsburgh: incline railway system, business district, residential area, buildings and grounds of the Carnegie Foundations, Carnegie Institute of Technology, St. Paul's Cathedral, Historical Society of Western Pennsylvania, University of Pittsburgh, Schenley High School, Pittsburgh Athletic Club and Masonic Temple, industrial district, and Highland Park Zoo.

#### SOUTH DAKOTA

632 ft., ed. (1921); 73 ft., uned. (1920)

Badlands; Indians in native dress dancing and riding; and tepees, wagons, and a travois with children on it

#### **TENNESSEE**

159 ft., ed. (1917)

Memphis: skyline, business district, waterfront, mule market, scenes in a park, and Harahan Bridge.

#### **TEXAS**

289 ft., ed. (1920); 497 ft., uned. (1920)

Austin: State capitol, Red Cross totem pole on the capitol grounds, business district, Governor's Mansion, and a dam on the Colorado River.

Dallas: a river at flood stage, manu-

facturing district, Masonic Temple, the city skyline in the evening, business district, and a meteor crater.

Irrigation canal and dam near El Paso.

San Antonio and area: a large catch of fish; cowboys on horseback, on a wooded trail, and around a campfire; mission ruins; an irrigation dam; Hole in the Wall trading post; Mission of San Juan de Capistrano; Mission San Francisco de la Espada; Mission Concepción; Concepción ditch and aqueduct; Mission San Jose; the Alamo; Mexican women washing clothes in a stream; San Antonio River in a residential area; park; and business district.

#### **VIRGINIA**

1,623 ft., ed. (1916, 1917)

Norfolk: panorama of town and harbor area, business district, the U.S. Naval Y.M.C.A., City Avenue, City Hall, Portsmouth Ferry, National Bank of Commerce, Main Street, Atlantic Avenue Post Office and Board of Trade, Granby Street, coalloading machinery in operation at dock, residential areas, Norfolk High School, Ghent Bridge, bales of cotton on a dock, and old section of the city.

Richmond: panorama of town, business district, Governor's Mansion and State Library in Capitol Square, White House of the Confederacy, City Hall, Three Chopt Road and Virginia Country Club, Pumping Station with soldiers guarding it, Confederate veterans' home, Monument Avenue, St. John's Episcopal Church, Washington and Lafayette's Revolutionary War Headquarters, falls of the James River, Seven Pines Civil War battlefield area, and statues and monuments.

#### WASHINGTON

2,745 ft., ed. (1916, 1917); 203 ft., ed., 16 mm. (1921); and 391 ft., uned. (1917)

Cascade Range and points of interest along the Columbia River Highway: Rooster Rock, Crown Point, Gorge of the Columbia, Latourell Falls, Falls of Multnomah, tunnel at Oneonta Gorge, Horsetail Falls, St. Peter's Dome, Falls of McCord Creek, Moffett Creek, Wahkuna Falls, Shepperd's Dell, Mt. Rainier, forests, glaciers, streams, and snow and a mountain lodge.

Seattle: waterfront; Puget Sound; Lake Washington Canal Locks; Volunteer Park; Lighthouse at Alki Point; Queen Anne Hill; University of Washington Campus; the Smith Building; Public Market; U.S. Courthouse, Customhouse, and Post Office; school buildings; St. James Cathedral; First Baptist and First Methodist Episcopal Churches; First Church of Christ Scientist; and statues and monuments.

Spokane: zoo, Duncan Garden in Manitou Park, business district, residential area, public library, and falls of the Spokane River.

Lake Coeur d'Alene in Idaho.

Tacoma: business district, waterfront, Pacific Avenue, residential areas, and Point Defiance Park.

Olympia: Temple of Justice and the Governor's Mansion.

Pleasure boat cruise along the Hood Canal and views of the San Juan Islands in the Strait of Georgia.

#### WYOMING

1,348 ft., uned. (1917)

Yellowstone Park: bear cubs climbing a tree, people feeding bears, waterfalls, boiling mud springs, can-

you of the Yellowstone River, several geysers, mountains, and a lodge.

# WASHINGTON, D.C., AND AREA 1,681 ft., ed. (1917, 1918, 1921); 2,162 ft., uned. (1916, 1921, 1924)

Panoramas of the city and the Potomac River; residential areas and the business district; Pennsylvania and Connecticut Avenues; the Mall looking toward the Capitol; and exteriors and interiors of the Capitol, White House, Library of Congress, and Bureau of Engraving and Printing. Exteriors of Government buildings including Patent Office; Pension; State, Army, and Navy; Treasury; Naval Radio Station; Senate Office; Naval Observatory: Department of Agriculture; Old Post Office; Smithsonian Institution and Smithsonian Museum of Natural History: Pan American Building; Union Station; French, former Russian, Italian, English, and former German Embassies; Georgetown University; Scottish Rite Temple; National Theatre; Oldest Inhabitants Building; Washington's Headquarters while surveying the capital site; Capitol Hotel where Congress met and Octagon House where President James Madison lived after the British burned Washington; Ford's Theatre and the house where Lincoln died; Lee Mansion: Carlisle House: Marshall House; Old Stone House, Georgetown; the Christian Heurich home; Mount Vernon house, outbuildings, and Washington's tomb; and Christ Church in Alexandria. L'Enfant's tomb and grave of the Unknown Soldier at Arlington Cemetery, Lincoln Memorial, Washington Monument, Grand Army of the Republic Monument, Christopher Columbus Memorial Fountain, and Roughriders'

Monument, Statues of Gen. Ulysses S. Grant, Adm. David Farragut, Gen. Andrew Jackson, Daniel Webster, George Washington, Benjamin Franklin, the Marquis de Lafayette, Gen. Casimir Pulaski, Baron von Steuben, Comte de Rochambeau, Thaddeus Kosciusko, Gen. Philip H. Sheridan, and Abraham Lincoln with a kneeling slave. President Warren G. Harding getting into a car; delegates to a World Arms Conference, including Charles Evans Hughes and Georges Clemenceau; and the funeral cortege of the Unknown Soldier and interment ceremonies at Arlington Cemetery, President Warren G. Harding and Gen. John J. Pershing in the procession.

#### HAWAIIAN ISLANDS

4,164 ft., ed. (1916, 1917, 1919)

Honolulu: residential areas; a business district consisting mainly of Japanese shops; the capitol, formerly the palace of Queen Liliuokalani; the home of Queen Liliuokalani; Judiciary Building; Mission Memorial; the Honolulu Normal School; a row of one-room school buildings with many children playing outside; the public library; Old Coral Church; a statue of King Kamehameha: views of Kapiolani Park; and a historical pageant with a parade and many children participating in dances and drills.

Hawaiian countryside: Waikiki Beach and Diamond Head, other beaches, mountains, waterfalls, tropical growth, and a village; people making poi, fishing with a seine in shallow water, surf riding, and making leis; banana, sugarcane, and pineapple growing; and Kilauea mountainside and active crater.

### PANAMA CANAL ZONE

1,883 ft., ed. (1919, 1922)

The canal; Rio Chagres; Gatun Dam; Gold Hill; blasting operations in Gaillard Cut; Empire Cut; electric locomotives pulling ships through the locks; details of lock mechanisms and emergency dams; Panama Railroad running beside the canal; villages of thatch huts along the canal banks; the towns of Cristobal, Balboa, Ancon, and Colón; and Chester Harding, Governor of the Canal Zone.

Panama City, Republic of Panama: waterfront, the President's house, the National Institute of Education, the Sea Wall, Avenida Centrale, and a street market.

Panamanians washing clothes and bathing in a stream, grinding meal with mortar and pestle, cooking out of doors, cooking over an open fire in a hut, and a man chaffing rice.

## REGIONAL GEOGRAPHY— FOREIGN

BAHAMA ISLANDS AND JAMAICA 2,397 ft., ed. (1920, 1921); 2,338 ft., uned. (1920)

Scenes on and from a schooner sailing from Nassau, New Providence Island, to Kingston, Jamaica: fishermen unloading catch, workers unloading log wood from a boat onto the beach, sailors on the deck of a schooner, and Port Royal.

Kingston, Jamaica: harbor, traffic in the warehouse area, native women carrying baskets on their heads, children, business district, and residential areas.

Nassau, New Providence Island: business district, street vendors, police station, ruins of Fort Fincastle and the Queen's Staircase, home of the Governor of Nassau, Governor's Guard, harbor, a statue of Christopher Columbus, and residential area.

Grantstown, New Providence Island: a stone quarry, a field of sisal, sisal bundles on a dock, women weaving sisal, and many natives.

Beaches, tropical and mountain scenery, towns and villages, piles of salt, shipping and farming, ox-drawn carts and plows, and British soldiers drilling.

Bimini Island.

#### **CANADA**

## The Canadian Rockies

2,782 ft., ed. (1916, 1919-21); 697 ft., uned. (1916-19)

A party taking an incline railway from Laggan to Lake Louise and climbing a mountain; tourists riding, climbing, swimming, golfing, and boating; Canadian Rockies in the area of the headwaters of the Columbia River; a party climbing Mount Edith Cavell by horseback and on foot; and Mount Victoria, Mount Whyte, and the Lefroy and Victoria Glaciers.

## Thousand Islands in the St. Lawrence River

347 ft., ed. (1919)

Islands, houses, and boat docks as seen from a moving boat.

#### **CUBA**

746 ft., uned. (1919)

Oxen pulling carts and plows, natives working in fields, native huts, and countryside near Havana; and Havana business district, public buildings, harbor, lighthouse on a rocky point, and lighthouse and fortifications as seen from the water.

#### **JAPAN**

379 ft., ed. (1920); 228 ft., uned. (1920)

Cherry Blossom Festival with a parade and geisha girls dancing in the street; and traffic scenes in Tokyo, including coolies pulling jinrikishas, people riding bicycles, horse-drawn vehicles, and streetcar and truck traffic.

#### **MEXICO**

2,979 ft., ed. (1918-21, 1925); 3,060 ft., uned. (1919, 1920)

Tour of Mexico by a group of Americans and Mexicans: Nogales, Ariz.: ruins of the Mission Tumacacori and the mission at Tuscon; El Paso business district, residential area, ruins of Old Fort Bliss and the new fort, and the bridge over the Rio Grande to Mexico; railroad stations and people at Jiménez, Zacatecas, and Aguascalientes; town of Guadalupe from a distance: railroad station, street scenes, and the residential area of Guadalajara; street scenes, Borda Garden, and Empress Carlota's bathing pool at Cuernavaca; and Mexico City street scenes, Plaza de Constitución, Chapultepec Castle and Park, several cathedrals and churches, the National Pawn Shop, the National Theatre, Palacio de Comunicaciones, Ministry of the Interior, the Chamber of Deputies, Benito Juárez Monument, Independence Monument, Alameda Park, Paseo de la Reforma, and the President-elect Alvaro Obregón greeting visitors and being escorted to his inauguration by retiring President Adolfo de la Huerta.

Hermosillo: street scenes, a school, public buildings, and ruins.

Juárez: Custom House, City Hall and Police Department, Juárez Agri-

cultural College, and ruins and a monument at Peace Grove.

Points of interest: the pyramids at San Juan Teotihuacan, the Rio Grande, Church of the Sacred City of Mexico Guadalupe, an old aqueduct at Guadalupe, Aztec artifacts in a museum, peons' homes. Spanish buildings and haciendas, and Viga Canals with Xochimilco Indians poling boats; Mexican seacoast at Mazatlán, Sinaloa, including rocky shoreline, harbor, and village of thatchroofed huts; and people on the beach, at railroad stations, in the patio of a large house, at a sidewalk café, and riding mules and bicycles.

#### REPUBLIC OF PANAMA

733 ft., ed. (1919); 268 ft., uned. (1919)

Panama City: traffic including streetcars, cars, horse-drawn carriages, horse-drawn and ox-drawn carts, and pedestrians; outdoor markets and vendors; waterfront with boats in the harbor; National Institute; the Presidencia; the Sea Wall; City Hall; the Plaza; Tivoli Hotel; and the ruins of San Domingo Church.

## HISTORY OF THE UNITED STATES

#### COLONIAL PERIOD

2,480 ft., ed. (1920, 1921); 999 ft., uned. (1916, 1918, 1920)

Pre-Columbian Old Stone Mill or Round Tower, Newport, R.I.

Map of Florida designating Spanish settlements at Tampa, St. Augustine, West Palm Beach, and Miami; monument at the site of Ponce de Leon's landing in Florida and the Fountain of Youth; and St. Augustine including the ancient wall around the old

city, the Post Office that was once the Spanish Governor's palace, streets and buildings in the old Spanish part of the city, a Huguenot cemetery, an old chapel, and ruins of San Marco Castle.

Palace of the Spanish Governors at Santa Fe, N. Mex.; Pueblo Indians building houses of stones covered with adobe, winnowing wheat, grinding corn on a metate, baking in outdoor beehive oven, weaving baskets, making jewelry and pottery, displaying blankets and rugs, and dancing; Spanish missions; cliff dwellings and Indian carvings on rocks; and desert and mountains.

Lake Champlain and ruins of Fort Ticonderoga.

Maps designating English settlements; rocky coast and Pilgrim's Monument at Provincetown, Mass.; Plymouth Rock, Forefathers' Monument, Pilgrim Hall, Pilgrim Cemetery, and the home of John Winslow at Plymouth, Mass.; Harvard University; Boston Common; Old Stone Mill, Washington Square, Channing Memorial Church, Colony House, and Belleview Avenue at Newport, R.I.; William Penn's home at Philadelphia, Pa.; and Pittsburgh, Pa., business district.

## REVOLUTIONARY WAR PERIOD

3,100 ft., ed. (1918, 1920, 1923, 1925); 170 ft., uned. (1918, 1919)

Maps indicating important Revolutionary sites.

Sites in Boston: Boston Common, Old State House, Faneuil Hall, Old South Church, King's Chapel and burying ground, Old South Meeting House, Beacon Hill, Harbor and Griffin and T Wharfs, Granary Burying Ground and headstones of several Revolutionary heroes, and Sons of Liberty and Massacre Monuments.

Sites at Lexington: Lexington Green, Hancock House, Buckman Tavern, Munroe Tavern, and Bunker Hill Monument.

Sites at Cambridge: Washington Elm, Harvard Hall, Washington's Headquarters, Paul Revere House, Christ Church, and Chopp's Burying Ground.

Sites at Concord: Wright Tavern, Monument Square, a British cemetery, and Concord Bridge and Monuments.

Sites at Philadelphia: City Hall, Independence Hall, Liberty Bell, Penn's home, Betsy Ross house, and Fairmont Park.

Site of Fort Washington and Washington's headquarters at Valley Forge.

Portraits of John Adams, Thomas Jefferson, and George Washington; Mt. Vernon; and history of the development of the U.S. flag.

#### CIVIL WAR PERIOD

1,623 ft., ed. (1917, 1920)

Map of the United States.

William Lloyd Garrison's tomb; portraits of James Buchanan and Abraham Lincoln; monuments to Confederate generals Robert E. Lee, A. S. Johnson, and Pierre G. T. Beauregard; and monuments to Union generals Ulysses S. Grant and William T. Sherman, and to Adm. David Farragut.

Harvard Memorial Hall.

Painting of the battle of the Monitor and the Merrimac; ruins of the fort and the battleground at Vicksburg; Ford's Theatre and the house

where Lincoln died; and inner line of breastworks, St. Paul's church, and Seven Pines battlefield at Richmond.

Scenes of a reunion of Confederate and Union veterans at Vicksburg and State monuments on the battleground.

#### NATURE STUDY

#### ANIMALS AND BIRDS

#### General

1,743 ft., ed. (1919, 1920, 1923); 3,246 ft., uned. (1920, 1921)

Domestic animals and young, wild animals and young in zoos and in natural habitats, domestic fowl and young, and wild birds and young in zoos and in natural habitats.

#### **Alligators**

653 ft., ed. (1920); 653 ft., uned. (1916)

Two men, one a Seminole Indian, hunting alligators in the Everglades; and alligators in enclosures.

#### Aquarium

809 ft., uned. (1919)

Turtles, various fish, eels, and crabs in tanks; and seals in an enclosure.

#### Bears

104 ft., uned. (1916, 1919)

Bears and cubs in woods and in cage.

#### Beaver

269 ft., ed. (1919); 51 ft., uned. (1918) Dam, beaver house, and beaver at work; and beaver coat and muff.

#### Birds

816 ft., ed. (1926); 1,290 ft., uned. (1916, 1920, 1921)

Wild birds, nests, eggs, and young: bluejays, downy woodpeckers, flick-

ers, redheaded woodpeckers, chipping sparrows, Baltimore orioles, catbirds, shrikes, nighthawks, nuthatches, barn swallows, bank swallows, robins, screech owls, and geese.

#### Ostriches

355 ft., ed. (1916)

Ostrich farm showing pens and keeper, and man riding ostrich.

### Porcupine

98 ft., ed. (1919)

Porcupine in tree and on ground, and quills in stick.

#### LUTHER BURBANK

2,431 ft., ed. (1917, 1919, 1922, 1927); 170 ft., uned. (1917)

Burbank's experimental farm in California; Burbank showing plants and trees including roses, walnuts, spineless cactus, flax, artichokes, monkey puzzle pine tree, wheat, potatoes, oats, rhubarb, cotton, sunflower, and lilies; and house, gardens, greenhouse, and fields.

#### **RIVERS**

951 ft., ed. (1919, 1920)

Streams and rivers in mountains, through valleys and gorges, and across prairies; dams; boating, swimming, fishing, speedboat racing, and cutting ice; harbor; and seashore.

## SEQUOIA TREES

511 ft., ed. (1923); 101 ft., uned. (1917)

Map of California, designating National Parks; and named trees and groups of trees including the General Sherman, the General Grant, the Grizzly Giant, and the Confederate Group.

### **RECREATION AND SPORTS**

#### **GENERAL**

432 ft., ed. (1917); 578 ft., uned. (1919, 1920)

Sporting events and recreational activities: tennis, horseracing, field events, soccer, boxing, baseball game, sandlot baseball, sailing, bowling on green, dice, checkers, sleighing, dog sledding, and others described in detail under the specific activity.

#### CAMP

183 ft., ed. (1918); 188 ft., uned. (1919)

Detroit Recreation Camp, Elizabeth Lake, Mich.: children and adults swimming, canoeing, and picnicking.

#### **CIRCUS**

255 ft., ed. (1919); 250 ft., uned. (1919)

Buffalo Bill Cody and an old Indian; circus parade; steam calliope; crowds; tent; and animals including elephants, dogs, horses and mules, camels, and zebras.

#### TROUT FISHING

390 ft., ed. (1919); 1,308 ft., uned. (1918, 1919)

Fishermen on the Au Sable River fly fishing from canoes and wading in river; group in and around house on riverbank; and a trout hatchery, process of taking eggs from trout, and different kinds and sizes of trout.

#### **FOOTBALL**

112 ft., ed. (1917); 233 ft., uned. (1919)

Two University of Michigan games, one versus Ohio State University.

#### **GOLF**

797 ft., ed. (1920, 1925); 971 ft., uned. (1919, 1925)

Professionals Ted Ray, Harry Vardon, Alex Ross, and Walter Hagen

playing golf at Detroit Golf Club; and other golfers.

#### HUNTING

287 ft., uned. (1920)

Small-game hunting with dogs.

#### PICNIC

250 ft., uned. (1916)

Young people picnicking on lake beach.

#### **POLO**

469 ft., uned. (1924)

Spectators and grandstands, horses paraded around field, trophies, and polo games.

#### **AUTO RACES**

108 ft., uned. (1919)

Drivers with cars, and race.

#### SPEEDBOAT RACES

204 ft., ed. (1919); 2,957 ft., uned. (1919-21, 1923, 1925)

Several speedboat races including Gar Wood driving Miss Detroit III on the Detroit River, marinas, judges' floats, racing boats at dock and racing, yachts, and spectators.

#### WATER SPORTS

829 ft., uned. (1919, 1920)

Surfboard rider, swimming instruction and demonstrations, races, and diving.

#### WINTER SPORTS

235 ft., ed. (1916, 1917); 663 ft., uned. (1916, 1919)

Iceboating; bobsledding; tobogganing; ski jumping; ice skating in hockey games, races, figure skating, and barrel jumping; and a skimobile.

#### SANITATION AND HEALTH

#### CHILDREN'S HOSPITAL

653 ft., ed. (1920)

Care, education, and recreational activities of chronically ill children in a hospital.

#### CITY WATER SUPPLY

428 ft., ed. (1921); 586 ft., uned. (1919)

Diagram illustrating water course from pumping station to water tap; intake crib in lake; tunnel to pumping station; filter tanks; pumping station; and springs, streams, and dams.

#### **TECHNICAL**

#### CARBURETOR

630 ft., ed. (1925)

Diagrams of carburetors and photographs of a carburetor and its parts, with detailed descriptions and demonstrations of carburetor operation.

#### COMMUNICATIONS SYSTEMS

1,136 ft., ed. (1920, 1921); 2,934 ft., uned. (1918-20)

History of message-sending techniques from runner to radio; telegraph sending and receiving; stock ticker sending and receiving; transatlantic cable system; and telephone systems illustrating line installation, switchboard installation and operation, the training of operators, and line repair.

#### **GEOGRAPHY**

1,526 ft., ed. (1919)

Diagrams, animated cartoons, balls, tops, and the like, illustrating the earth's relationships to the sun and moon, earth's shape and motion, and

effect of earth's motion on the seasons of the year and the determination of units of time; and explanation of earth's gravitational pull.

#### OIL

934 ft., ed. (1925); 869 ft., uned. (1920, 1921); 1 ft. of freeze clips (1926)

Oil drilling and refining techniques: includes diagrams of earth's crust, illustrating typical location of oil pools; drilling, striking, and pumping; derricks and drilling machinery; shooting a well with nitroglycerine; shutting off a gusher; storage tanks; transporting crude oil by pipeline, railroad tank cars, and ship; stills at a refinery; distillates in order of drawing off; and transporting gasoline by pipeline to dock and by ship to Europe.

#### SHIPYARD CONSTRUCTION

891 ft., uned. (1917)

Construction of Hog Island Shipyard, Delaware River, Pa., including hiring workers, driving piles, laying floor, and constructing ways.

#### WATER POWER

616 ft., ed. (1920); 2,015 ft., uned. (1916, 1919, 1920)

Mountain streams, rivers, and waterfalls; water wheels and mills; dams and power plants; and high tension lines.

#### **ZINC**

739 ft., ed. (1919)

Maps indicating locations of zinc mines; mine town; underground and open pit mining processes; elevators, mine cars, buckets, and steam shovels; several techniques for recovering zinc from ore; smelting; drawing zinc from furnace; and casting slabs.

## SPECIAL SUBJECTS

#### GENERAL INTEREST ITEMS

251 ft., ed. (1919, 1921); 2,426 ft., uned. (1918-20, 1923, 1924)

Men in a rowboat on a lake; two small children playing with snakes; a boy performing dramatic monologues; a group of men entering a dining room; men walking through a large stone arch and along a beach; group of men and women boarding a motor launch; several couples taking turns performing comic skits; a bugler blowing bugle and troops leaving barracks; a man playing a violin; a house under construction; a country house with people in front; camping scenes including a picnic in the mountains, a camping motorcade, campsites, and two men camping in a car; scenes of the countryside, including traffic, burros loaded with wood, farm buildings and a windmill, an oxcart loaded with logs, and a mule-drawn plow; Curtiss JN-4D (Jenny) airplane taking off and in flight over a military airfield in a recruitment appeal for the air service; model planes shown and launched by boys; storm-damaged trees and buildings in residential area; and truck and pedestrian traffic in an industrial area.

#### **CARTOONS**

Boycott Cartoon 47 ft., ed. (1919)

Comedy Cartoons 903 ft., ed. (1919-21)

High Cost of Living Cartoon 58 ft., ed. (1920)

## Liberty Loan and Patriotic Cartoons, World War I

627 ft., ed. (1917, 1919)

Liberty loan appeals and anti-German propaganda.

### U.S. Thrift Stamp and Anti-Industrial Workers of the World (IWW) 159 ft., ed. (1919)

#### **NEWS ITEMS**

500 ft., uned. (1920, 1923)

Albion College Inaugural ceremony, Albion, Mich., and the 100th anniversary celebration of Ypsilanti, Mich. (1923).

#### **PARADES**

A parade in New York City, and costumed girls riding in carriages mounted on railroad wheels and drawn by an old locomotive.

## "Ford News," 1934

The "Ford News" consists of short newsreels shown at Detroit theaters for advertising purposes during 1934. The collection contains 7,249 feet of edited, 35 mm., silent, black and white film; 597 feet of unedited, 35 mm., silent, black and white film; and 532 feet of duplicate film.

and Central High School posing separately.

#### BOWLING

Women's exhibition.

#### BOXING

Golden Gloves championship fights.

#### PROMINENT INDIVIDUALS

## MAYOR FRANK COUZENS OF DETROIT

With Polish-American Legionnaires, greeting Polish General Haller.

## SECRETARY OF LABOR FRANCES PERKINS

In Detroit.

#### MARY PICKFORD

Visiting Detroit.

## BEBE DANIELS AND BEN LYON

Visiting Detroit.

#### **GLORIA SWANSON**

Visiting Detroit.

#### **SPORTS**

#### BASEBALL

Highlights of the 1934 World Series between the Detroit Tigers and the St. Louis Cardinals.

#### BASKETBALL

Teams of Northern High School

#### **FENCING**

Exhibition.

#### **GOLF**

Women's tournament.

#### HOCKEY

Game between the Detroit Red Wings and the Ottawa Senators, and locker room scenes.

#### **ICEBOATING**

On the Detroit River.

#### LACROSSE

Indoor game between Detroit and Pittsburgh.

#### RACING

Gar Wood, hydroplane driver, posing; Harmsworth Trophy Race cancelled for lack of a challenger; stock car road-racing at Los Angeles; and a turtle race.

#### SKI JUMPING

Contest.

#### **SOUASH**

Women's tournament.

### GENERAL NEWS AND HUMAN INTEREST ITEMS

### CIVIC PROJECTS

Boy Scouts and the Red Cross collecting items for the needy, Goodwill Industries activities, and a Daughters of the American Revolution bookfair.

#### DETROIT POLICE DEPARTMENT

Activities including an archery class, the new Chief being honored at a banquet, and a new van for horses and men of the mounted unit.

#### **ENTERTAINMENT**

Shrine Circus, Clyde Beatty working with lions, a magician, the annual Artists' Club Ball, the Variety Club Ball, a military ball and historical pageant, a pet show with many kinds of animals, dog shows, flower

show, fashion shows displaying hair styles and women's clothing, and a children's handicraft exhibit of bird houses.

#### **GENERAL NEWS ITEMS**

Belgians of Detroit attending a funeral mass for King Albert, \$5 per day minimum wage resumed by Ford, Fort Wayne troops parading in review, and Mark Hanna awarding a medal to three children for saving a dog's life.

#### **HUMAN INTEREST ITEMS**

Ballet classes, cleanup after a heavy spring snowstorm, a new Federal building, feeding starving ducks on a frozen pond, Navajo Indians giving a sand-painting demonstration, people waiting in line to buy automobile license tags, streamlined trains, and a project for widening a street.

## Special Subjects, 1920–52

Film in this category did not result from any of the planned series of the Ford Motion Picture Laboratories. nor does it reflect activities or functions of the Ford Motor Company. Included are films, taken from 1920 to 1952, on agriculture and conservation, charity, drama, education, geography, news, and sports and recreation. The collection contains 31,-819 feet of edited, 35 mm., silent, black and white film; 9,421 feet of edited, 35 mm., composite, black and white film: 726 feet of edited, 16 mm., silent, black and white film; 17,396 feet of unedited, 35 mm., silent, black and white film; 1,083 feet of unedited, 16 mm., silent, black and white film; 459 feet of unedited, 16 mm., silent, color film; and 13,356 feet of 35 mm. and 4,868 feet of 16 mm., duplicate film. Exceptions only to 35 mm., silent, black and white film will be mentioned.

## AGRICULTURE AND CONSERVATION

#### CORN BORER

2,056 ft., ed. (1927)

Filmed in cooperation with the U.S. Department of Agriculture, Bureau of Entomology, and Michigan State College.

Life cycle of the corn borer, field infestations, and extermination methods.

#### RANCHING

277 ft., uned. (1934)

Portraits of Buffalo Bill, Kit Car-

son, General Custer, David Crockett, and Daniel Boone; and cowboys herding cattle on prairie.

#### WILD GEESE

556 ft., ed. (1937)

Canadian geese at a refuge on the farm of Jack Miner in Kingsville, Ontario, Canada.

#### **CHARITY**

## CHILDREN'S HOUSE, DETROIT

2,480 ft., ed.; 1,794 ft., uned. (1937)

Four- to twelve-year-old children marching and playing percussion instruments, in woodworking shop, working with clay, making and trying on costumes, wood and linoleum block printing, making papier mache masks and helmets, making miniature farm and animals, and sketching and painting.

## DETROIT COMMUNITY FUND APPEAL

236 ft., ed. (1920)

Work of the Community Fund: visiting nurses; outpatient clinics and hospital wards; settlement work including the teaching of cooking, sewing, and English for immigrants; recreational services including swimming; derelicts sleeping in shacks and in cars on street; orphan care and adoption; and occupational training for the blind.

#### FLOOD RELIEF

538 ft., uned. (1937)

Detroit Red Cross workers collect-

ing, sorting, and packing clothing; and volunteers loading boxes into a boxear.

### HOSPITAL FUNDS APPEAL

392 ft., ed. (1941)

Services and facilities of Hotel Dieu, Windsor, Ontario, Canada: the training of nurses, laboratory, operating rooms, pediatrics floor, Lions Club Sight Clinic, and Rotary Club Crippled Children's Clinic.

### MICHIGAN HUMANE SOCIETY

927 ft., ed. (1929); 359 ft., uned. (1935, 1936)

Functions of the Michigan Humane Society: exhibit promoting wildlife conservation and kindness to animals, old and new ambulances for horses, inspection of stable horses and of chickens in cages at market, caring for sick animals, and giving puppy to children.

### VARIETY ARTISTS' RELIEF COM-MITTEE FUNDS APPEAL

452 ft., ed., comp. (1932)

George Jessel appealing for funds for the committee.

### **DRAMA**

#### **CHRISTMAS**

1,163 ft., ed.; 1,287 ft., uned. (1920, 1926, 1935)

Santa Claus at log cabin in woods, making toys, feeding reindeer, loading sleigh, and delivering presents; and children visiting Santa's Workshop and playing with toys.

## "MARY HAD A LITTLE LAMB"

1,537 ft., uned. (1926)

Actors in colonial costumes, and little girl finding and caring for an orphan lamb.

## "ROMEO AND JULIET"

2,113 ft., uned. (1926)

Rehearsal scenes from an amateur production of Romeo and Juliet.

#### **EDUCATION**

#### FIREFIGHTING

272 ft., uned. (1942)

Firefighting devices demonstrated: liquid and foam extinguishers, and sand.

#### GOOD ROADS PROMOTION

2,127 ft., ed. (1924); 1,048 ft., uned. (1930, 1931, 1939)

Hardships of life on the farm because of bad roads, portraying scenes of missing the milk train and a wagon stuck in the mud; farm boy becomes an engineer and goes back home to build good roads; and concrete road-building with heavy equipment.

#### MERRILL-PALMER SCHOOL

8,678 ft., ed. (1927, 1928)

Nursery school: school plant and play yard; reports between parents and teachers; indoor activities including feeding and caring for pets, planting flowers, making objects of wood and clay, playing with blocks, showing objects brought from home, acting out and listening to stories, learning self-grooming and personal hygiene, serving and eating lunch, and taking naps; outdoor activities—using assorted playground equipment; and physical and mental examinations.

#### MICHIGAN STATE POLICE

3,564 ft., ed., comp. (1939)

Michigan State Police headquarters, barracks, and training school at East Lansing; and buildings at Detroit, Mount Pleasant, and Brighton.

Training: marksmanship, first aid, swimming and lifesaving, and motorcycle riding.

Work of the State Police: highway and air patrol, accident investigation and assistance to people, crime prevention and investigation, and education.

Facilities: dispatching board and communications systems, driver's license department, Identification Bureau with scenes of fingerprinting and handwriting identification, and laboratory including polygraph and X-ray machines and ballistics tests.

#### "TICKET TO FREEDOM"

1,498 ft., 16 mm., comp. (1952) Film urging people to vote.

#### TRAFFIC

1,474 ft., ed. (1922)

Filmed in cooperation with Detroit Police Department.

Deputy Police Commissioner reporting on accidents; causes of accidents and instruction in safe practices for drivers of cars and for pedestrians, illustrated by animated diagrams and cartoons; and accidents between children and vehicles and two or more vehicles.

### **GEOGRAPHY**

## BRYCE AND ZION NATIONAL PARKS, UTAH

1,311 ft., ed., comp. (1940, 1946)
Points of interest and facilities in both parks.

#### DETROIT

1,120 ft., ed. (in German) (1929); 1,780 ft., uned. (1921, 1925, 1926, 1929, 1931, 1932)

Aerial views of Detroit business district, waterfront, and suburban and

industrial areas; buildings including Fisher. Lincoln, General Motors. Packard, Hudson, and Henry Ford Hospital; business district from the ground; Detroit Library and Art Museum; Belle Isle; Dr. Prince Louis Ferdinand, grandson of Kaiser Wilhelm II, at Ford Motor Company with Henry Ford, flying airplane, and in his apartment; and Edsel Ford with Baron von Huenefeld, Maj. James E. Fitzmaurice, and Hermann Koehl.

## FORD-TRANS WORLD AIRLINES METEORITE TRIP

749 ft., uned. (1941)

Desert and meteorite craters from the air, people around edges of and inside huge crater, and caravan on desert road.

## GLACIER NATIONAL PARK, MONTANA AND CANADA

847 ft., ed., comp. (1939)

Points of interest and facilities on both sides of the border, and Blackfoot Indian ceremonial dance.

#### STATE OF MICHIGAN

690 ft., ed. (1939)

Attractions of Michigan: lake and stream fishing; Detroit; Greenfield Village; hills, forests, and beaches of Lower Peninsula; and waterfalls, cliffs, and beaches of Upper Peninsula, with scenes of fishing.

#### MONROE, MICH.

447 ft., uned., 16 mm. (1941)

Band marching and playing in football stadium; field events including foot races, high jumping, and pole vaulting; Monroe business district, park, monuments, residential area, church, hospital, industrial plants, and buildings; and National Farm Youth Foundation convention, banquet, boys receiving awards, speeches, and dance.

## RAINBOW BRIDGE-MONUMENT VALLEY EXPEDITION

1,718 ft., ed., comp. (1937)

Students on field trip into Rainbow Bridge-Monument Valley area of Arizona and Utah: map; station wagon and truck caravan through desert and mountains; camping on the banks of the Colorado River; taking boats down the Colorado River; base and other camps; burro caravan on mountainside; Navajo village with scenes of Indians grinding corn, spinning, and weaving; Navajo clothing and jewelry and baby on cradle board; Hopi village, captive western redtail hawk, and woman painting pottery; party digging up Indian graves and finding bones and pottery; and cliff dwellings and Pueblo ruins, paintings on walls, and artifacts.

## THUNDER BAY, MICH.

158 ft., uned., 16 mm., k. (1947)

Shore from the water and from land.

## YELLOWSTONE NATIONAL PARK, WYO.

946 ft., ed.; 1,423 ft., ed., comp. (1936, 1940)

Points of interest, facilities, and animals.

## HAVANA, CUBA, AND PANAMA CANAL

100 ft., uned. (1927)

Havana Harbor, ruins of Castillo del Morro with lighthouse inside walls, castle on a hill, Havana skyline, Panama Canal with ship in lock, and locomotive.

## SOUTH AMERICA AND MEXICO 13 ft., uned. (1929)

Single frame stills of pyramids and ruins of mission in Mexico; Mexican and South American Indians with their homes, animals, and implements; carrying burdens on backs and heads, washing clothes, and in dugout canoes and thatched boats; South American villages and cities with scenes of Rio de Janeiro including Sugarloaf, Guanabara Bay, Corcovado, business and residential areas, and Copacabana Beach; Peruvian Andes; and coffee plantation.

#### **NEWS**

## PRESIDENT CALVIN COOLIDGE

43 ft., uned. (1926)

Speaking at a construction site.

## DEARBORN CENTENNIAL CELEBRATION

3,033 ft., uned. (1923)

Parade: horse-drawn vehicles including wagons, carriages, stage-coaches, fire engine, carts, and buggies; early model cars and trucks; locomotive on streetcar tracks; ponydrawn miniature steam engine and farm implements; floats; and costumed people including Indians.

## DETROIT CRUSADE FOR FREE-DOM RALLY

399 ft., uned., 16 mm. (1951)

Ceremonies: speakers on platform, including Henry Ford II, Drew Pearson, and Harold E. Stassen.

## LAKE SHORE COUNTY FAIR

301 ft., uned., 16 mm., k. (1944)

Fairgrounds and tents; people including Henry Ford, Mrs. Henry Ford, and Henry Ford II; exhibits

including horses, ponies, cattle, goats, pigs, and sheep; roadside market; and band.

#### POLICE FIELD DAY

319 ft., uned. (1929)

Golf, antics on field, grandstand, and police shooting from prone positions at small log cabin on field.

#### TRUMAN INAUGURAL PARADE

18 ft., uned., 16 mm. (1949)

President Harry S. Truman and Vice President Alben W. Barkley leaving Capitol, parade, crowds, and airplanes in formation.

#### SPORTS AND RECREATION

#### BASEBALL

206 ft., ed., comp. (1946); 441 ft., uned. (1929, 1930)

Opening games of the Detroit Tigers; Comiskey Park, Briggs Stadium, Wrigley Field, Yankee Stadium, Ebbets Field, and Fenway Park; game; and players, some playing, some posing, including Bill Volselle, Bernie Tebbetts, Steve O'Neill, Dizzy Trout, Hank Greenberg, Dick Wakefield, and Barney McCosky.

### BOYS' CAMP

141 ft., uned. (1926)

Chapel and building, band, and hiking.

#### BOY SCOUT CAMPS

3,070 ft., ed. (1937)

Detroit Camporee: campsite; boys arriving, setting up different kinds of tents, and using trek cart; and activities including cooking and eating out of doors, policing camp, building fire by friction, semaphore drill, and inspection.

Camp Brady, Brighton, Mich: campsite, totem pole, and tents; setting up camp; program including cooking out of doors, first aid, surveying, building log cabin, and nature study; field and track events; water activities including swimming, lifesaving, canoeing, surfboard riding, and sailing; and crafts, trips, mess, and a council fire.

## CANADIAN WOODCRAFT CAMP 993 ft., ed. (1927)

Taylor Statten Woodcraft Camps, Canoe Lake, Algonquin Park, Canada: boys' camp activities including performing camp chores, boxing, swimming, sailing, riding, and nature study; Ojibway Indians teaching woodcraft and how to make, carry, and paddle birchbark canoes; girls' camp activities including basket weaving, riding, swimming, and diving; and coeducational activities including sailing and canoeing.

## VETERANS OF FOREIGN WARS (VFW) BUDDY POPPY CAMP

1,069 ft., uned. (1934)

Cabins and tents in woods; physical examinations; inspection; flag ceremony; mess; activities including horseshoes, baseball, volley ball, boxing, swimming, and calisthenics; and instruction in wigwag signaling, first aid, woodworking, and leatherworking.

#### **FOOTBALL**

726 ft., ed., 16 mm. (1929)

Game between Boys Town and Catholic Central.

#### **GOLF CADDYING**

945 ft., ed. (1925)

Instructions in caddying by con-

trasting the right and wrong ways of doing things.

### MICHIGAN PIKERS' ASSOCIA-TION TOUR

3,006 ft., ed. (1920)

Michigan Pikers' Association good roads tour in Canada and Michigan: Canadian towns and countryside; camping equipment, camp life, and entertainment; ferryboats; locks of Soo Canal; parade at Sault St. Marie, Mich.; camp at Duncan's Bay; and parade at Lansing.

#### SPEEDBOATING

583 ft., uned. (1933)

Miss England II, Sunkist Kid II, and other hydroplanes on Lake Garda, Italy.

### **SWIMMING**

850 ft., ed. (1948)

Swimming instruction for mildly disabled to triplegic veterans.

#### **TOBOGGANING**

82 ft., uned. (1927)

Boy tobogganing down run.

#### **MISCELLANY**

2,044 ft., uned. (1925-28, 1931, 1936, 1937, 1939, 1940); 219 ft., uned., 16 mm. (1941)

Odds and ends of footage that do not belong in any of the above categories: several chauffeur-driven cars discharging passengers at curb and reporters talking to a chauffeur; traffic on parkway in residential area; traffic in a business district; country scenes; boy playing with greyhounds; women leaving large open-sided tent; men standing in front of a billboard; group posing with a Martin bomber in hangar; two officers standing in front of plane looking at chart; a large airliner and a small two-place plane on a field; man moving manure by wheelbarrow from pile in street; stonemasons and bricklayers; leaders of the Axis Powers, World War II, including Emperor Hirohito, Adolph Hitler, Benito Mussolini, Count Ci-Hermann Goering, Bormann, Rudolph Hess, Heinrich Himmler, and Bruno Frank at meetings, making speeches, and the like; band and color guard in parade; floats depicting the State of Mississippi; and deer in woods.

# Part II FORD FAMILY





Henry Ford, ca. 1918. Reel No. 200FC-2558.



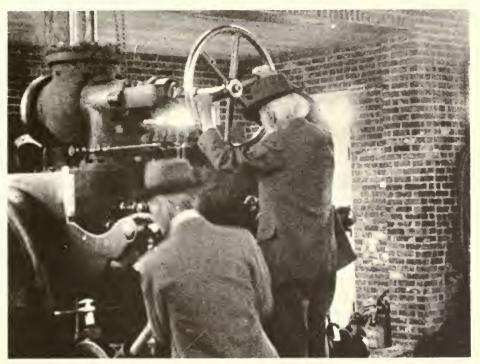
Henry Ford and John Burroughs, ca. 1918. Reel No. 200FC-2558.



Left to right: Will Rogers, Henry Ford, and Edsel Ford, ca. 1928. Reel No. 200FC-427(a).



Diego Rivera at work, 1932. Frescoes are in the Garden Court of the Detroit Institute of Arts, Detroit, Mich. Reel No. 200FC-2704.



Henry Ford and John Burroughs operating an old steam engine, ca. 1919.

Reel No. 200FC-2132.



Left to right: Henry Ford, President Herbert Hoover, and Thomas A. Edison at the celebration of the golden anniversary of the incandescent lamp, Greenfield Village, Mich., October 21, 1929. Reel No. 200FC-2578(c).



# Ford Family and Friends 1916–50

This body of film reflects the personal interests and family and social life of Mr. and Mrs. Henry Ford from 1916 to 1945. Pictures taken at the funerals of Henry Ford (1947) and of Mrs. Ford (1950) are also in the series. The collection contains 5,832 feet of edited, 35 mm., silent, black and white film; 24,116 feet of unedited. 35 mm., silent, black and white film; 399 feet of unedited, 16 mm., silent, color film: 74 feet of unedited, 16 mm.. silent, black and white film; and 3,190 feet of 35 mm., duplicate film. Exceptions only to 35 mm., silent, black and white film will be mentioned.

#### **FAMILY ALBUM**

## GENERAL

1,000 ft., ed. (1924, 1927); 10,703 ft., uned. (1916-29, 1938, 1939, 1944, 1945); 74 ft., uned., 16 mm. (1945)

House, gardens, and River Rouge at Fair Lane; farm scenes; yacht Sialia; and people including Henry and Mrs. Ford, Edsel and Mrs. Ford and their children (Henry II, Benson, Josephine, and William Clay), John Burroughs, Thomas A. and Mrs. Edson, Will Rogers, and Floyd Gibbons.

John Burroughs and Ford family laying stones in rock garden at Fair Lane.

Henry and Mrs. Ford on grounds at Fair Lane, playing with grandchildren, with children walking on ice, riding in horse-drawn sleigh, and getting on train with the Thomas Edisons and the Edsel Fords.

Henry Ford tinkering with steam engine, felling large tree, broad jumping in field, playing violin, ice skating, target shooting with Thomas Edison and Will Rogers, in tropical garden with the Thomas Edisons, receiving medal from Roumanian Consul, with Floyd Gibbons in office, and cutting wheat with a scythe and tying sheaves at a wheat harvest at Tecumseh, Mich.

Edsel Ford riding horse, in launch Woodfish, and with Henry Ford on yacht Sialia.

Henry Ford, Henry II, and Benson Ford clearing land, with scenes of boys felling trees with two-man saw, trimming trees, riding on logs, and driving snaking team.

Activities of the Ford grandchildren at various ages, including sledding, playing on ice, riding donkey and being thrown, riding in ponydrawn cart, fighting, playing with miniature steam engine, and helping Henry and Edsel Ford in garden.

Garden parties at Fair Lane.

#### CAMPING TRIPS

4,832 ft., ed. (1916, 1918, 1920, 1921): 7,658 ft., uned. (1919, 1921-24)

Campsites; equipment such as tents, trucks, and cooking facilities; and staff.

Campers including Henry and Mrs.

Ford, John Burroughs, Harvey and Mrs. Firestone, Sr., Thomas A. and Mrs. Edison, Dr. Clara Burrus, Harvey and Mrs. Firestone, Jr., Russell and Mrs. Firestone, Bishop and Mrs. Anderson, Edsel and Mrs. Ford, and President Warren G. Harding.

Campers walking in woods, sitting around campfires, riding horseback, fishing, shooting, gathering berries, touring old sawmill, inspecting old locomotive, and boarding and leaving yacht Sialia.

Henry Ford cooking, chopping wood, climbing tree, and washing clothes in stream.

Thomas Edison in hammock, reading, and sleeping under tree.

President Harding riding a horse and chopping wood.

# HENRY FORD BIRTHDAYS

3,103 ft., uned. (1938, 1943)

Mr. and Mrs. Henry Ford in box at Coliseum, Michigan State Fairgrounds, at Mr. Ford's 75th birthday celebration (July 15-30, 1938); parade of children and floats, color guard and drum corps, American Legion band, and 1908 Model-T; acts consisting of dancing, singing, and acrobatics; ceremonies at Greenfield Village; procession of horse-drawn vehicles; the Fords, including Edsel and

Henry II, in receiving line, riding in carriages, with crowd on riverboat *Suwanee*, and at first shop with Quadricycle; and motorcade through streets.

Mr. Ford and officers reviewing troops from covered reviewing stand at naval celebration of his 80th birthday; and birthday cake in shape of barracks at Naval Training School, River Rouge.

## **FUNERALS**

## HENRY FORD

875 ft., uned.; 88 ft., uned., 16 mm., k. (April 8, 1947)

Flags at half staff at Greenfield Village and Ford Motor Company, long line of people filing past open coffin in Henry Ford Museum, crowd outside St. Paul's Cathedral and funeral procession entering and leaving cathedral, and Ford family.

## MRS, HENRY FORD

311 ft., uned., 16 mm., k. (1950)

Members of the Ford family entering St. Paul's Cathedral; funeral procession leaving church; and family, including Mr. and Mrs. Henry Ford II and daughters, and Mr. and Mrs. Benson Ford, at graveside services.

# Ford Family Philanthropies 1916–54

Film in this category illustrates the activities of a small group of institutions to which the Fords gave financial assistance. Institutions receiving partial support from the family include the Berry School, Rome, Ga., contributed to by Henry and Clara Ford from about 1925 until their deaths; and the Detroit Institute of Arts, heavily endowed by Edsel Ford from 1920 until his death. Institutions created by and supported entirely by the Fords include Camps Legion and Willow Run, Mich., operated by Henry Ford from 1938 until 1941; the Ford Foundation, incorporated in 1936; and the Henry Ford Hospital, built in 1914 and administered by the family. The collection contains 9,650 feet of edited, 35 mm.. silent, black and white film; 1,834 feet of edited, 16 mm., composite, black and white film; 21,814 feet of unedited, 35 mm., silent, black and white film; and 2,271 feet of duplicate, 35 mm. film. Exceptions only to 35 mm., silent, black and white film will be mentioned.

# INSTITUTIONS RECEIVING PARTIAL SUPPORT

BERRY SCHOOL, ROME, GA. 1,700 ft., uned. (1927)

Children and young people staging pageant depicting the history of the school: the first building, a log cabin; the admission of girls; a visit of Theodore Roosevelt to the school; building the Foundation School; and service of boys from the school in World War I.

Miss Martha M. Berry riding in a horse-drawn buggy in a procession of children and young people, and giving a speech at a fundraising ceremoney

# **DETROIT INSTITUTE OF ARTS** 11,512 ft., uned. (1932, 1933)

Diego Rivera painting an industrial mural at the Detroit Institute of Arts, and the finished mural.

# INSTITUTIONS CREATED BY THE FORDS

# CAMP LEGION AND CAMP WIL-LOW RUN

1,401 ft., ed. (1940, 1941); 1,432 ft., uned. (1938, 1940)

Camp facilities: tents; chapel, boys conducting church service; kitchen, boys and cooks preparing food; dining hall; and roadside stand, boys selling produce.

Boys at work, truck farming with handtools and tractor-drawn implements, canning vegetables and fruit, and collecting maple sap and making syrup.

Boys working in Ford plants and Village Industries on pump maintenance and small-parts manufacturing, and in powerplant. Boys playing baseball; playing guitar and singing; writing letters; playing with camp mascot, a crow; and taking showers.

## FORD FOUNDATION

1,834 ft., ed., 16 mm., comp. (1954) Henry Ford II and Mr. H. R. Gaither, President of the Ford Foundation, explaining and illustrating the purposes and work of the Foundation.

#### HENRY FORD HOSPITAL

6,753 ft., ed. (1935, 1936, 1939); 5,556 ft., uned. (1916, 1919-21, 1924, 1926, 1932-34, 1938)

Soldiers, crowd, speeches, and a flag ceremony in front of new building (probably the demilitarization of the hospital, 1919).

Facilities: laundry, kitchen, bakery, maintenance shop, pharmacy,

powerhouse interior, heating plant, and library.

Selecting students for the Clara Ford School of Nursing.

Crippled children and adults demonstrating details of crippling deformities and their effects on mobility; the convalescent school; work of the Pediatrics Division, including infant care and immunization against smallpox and diphtheria; diagnoses of and treatment for various maladies including gallstones, gallbladder disease, anemia, vascular disease, high blood pressure, tuberculosis, and hay fever; tests for protein allergy; tannic acid treatment for burns; several surgical procedures and the administration of anesthetics: demonstrations of the use of machines for fever, diathermy, and X-ray therapy; physical therapy; the administration of oxygen; the orthopedic appliances shop; and the optical and dental laboratories.

# Henry Ford Personal Projects 1914–42

This category reflects the personal interests of Henry Ford and contains illustrations of his personal projects over the years 1914 to 1942, including dancing classes and parties sponsored by the Fords; the Dearborn Independent, a weekly newspaper published from 1919 to 1928; the Henry Ford Museum and Greenfield Village; and the Ford family farm, the buildings of which were renovated and furnished between 1919 and 1926. The collection contains 5.499 feet of edited, 35 mm., silent, black and white film; 13.597 feet of edited. 35 mm., composite, black and white film; 104,032 feet of unedited, 35 mm.. silent, black and white film; and 19,685 feet of 35 mm., duplicate film. Exceptions only to 35 mm., silent, black and white film will be mentioned.

# DANCING

# DANCING CLASSES AND PARTIES

3,587 ft., uned. (1926, 1927)

Oldtime dances on lawn of Botsford Tavern, and children's dancing classes and parties in open-sided tent and gym-type building.

## **PUBLISHING**

# DEARBORN INDEPENDENT NEWSPAPER

1,535 ft., ed. (1920, 1926)

Dearborn Independent Editorial

Department: illustrations of range of subject matter covered in the newspaper, including government and politics, adventure, nature, sports, history, agriculture, fine arts, book reviews, world news, and the editorial page.

Processes in publishing the paper: illustrations being painted; setting and casting type; proofreading; worker making wax mold from proof plate, electroplating with copper, removing copper shell from wax, pouring lead into the back of the shell, and curving the finished electrotype; locking the plates into the cylinders of the presses; presses in operation; and machinery for trimming paper.

Subscription department with workers making address plates, map of United States indicating circulation distribution, mailing machine addressing newspapers and workers sorting them, and people reading the *Dearborn Independent*.

## **FARMING**

# FORD FARM

36,389 ft., uned. (1914, 1916, 1917, 1919-32, 1935-37, 1939, 1940)

Farm buildings at original site and at Greenfield Village.

Henry and Mrs. Ford and guests, including children, at several barn dances; Mrs. Ford, Mrs. Gaston Plantiff, and other ladies in 19th-century costumes play-acting outside and in-

side house and modeling costumes; and Mrs. Henry Ford and Mrs. Edsel Ford with a small child and a bulldog in a pony-drawn sleigh.

Henry Ford on horseback and in buggy, chopping wood, cutting wheat with a sickle, threshing with a flail, tying sheaves of wheat, driving horse and tractor-drawn implements, inspecting soybean field, and tending steam engine.

Edsel Ford on horseback, in a buggy, and with a steam tractor.

John Burroughs tending steam engine, chopping a tree, and pitching straw.

Farmwork performed by hand, including stacking hay, shocking wheat and loading shocks onto wagons and trucks, storing sacks of wheat in barn, threshing with flails, stacking straw, chopping and sawing wood, splitting rails, and harvesting truck produce; horse-powered winch pulling stumps; implements horse-drawn plows, mowers, reapers, and the like; horse-powered threshing machine in barn and in field with horses walking in circle and turning drive shaft set at hub of frame; ox-drawn plow; tractorpowered winch moving barn set on logs; tractor-drawn implements such as plows, cultivators, binders, disk harrows, potato digger, reapers, combines, mowers, planters, and fertilizer spreader; tractor-powered saw; scenes of steam tractor pulling stumps, showing details of drive mechanism; steam engines and details of parts; steam engine-powered threshing machines in barn and in fields; and children watching threshing, examining and operating controls on steam engine, and playing in straw.

Food preparation and eating in the farmhouse kitchen, food for several

picnics prepared over open fire and outdoor cookstove in farmyard, and workers and guests eating at tables set on lawn.

Sulky driving and racing on track, horseback riders pacing sulkies; spectators and participants cooking and eating out of doors; and boy putting horse through tricks such as bowing and rolling over.

Fragmentary scenes from drama about 19th-century life on Ford farm; costumed man, woman, and two children picking vegetables in garden; woman spinning, setting table, and cooking over open fireplace; man feeding horses in barn; family in fields and barn and operating handpowered threshing machine; man milking cow; and gristmill with overshot water wheel.

Miniature farm implements.

# HENRY FORD MUSEUM AND GREENFIELD VILLAGE

# COLLECTIONS PRIOR TO BUILD-ING OF MUSEUM AND VILLAGE

Sawmills

Sharon Hollow

1,047 ft., uned. (1926)

Exterior and interior views of sawmill at original site: a moving saw platform, a revolving saw and a saw with straight blade that moves up and down, and workers turning and moving log on platform for each cut.

Macon, Mich.

714 ft., uned. (1928)

Henry Ford inspecting sawmill at original location, helping workers move logs onto conveyor into mill, and helping workers move boards into and out of mill.

# Stagecoach

60 ft., uned. (1926)

Stagecoach traveling across field, stopping for passenger, and moving on.

## HENRY FORD MUSEUM

1,092 ft., uned. (1928)

Thomas A. Edison, Henry and Mrs. Ford, and Edsel Ford at Edison's laboratory, Greenfield Village; and at cornerstone dedication ceremonies consisting of Edison embedding Luther Burbank's spade into wet concrete slab, walking across slab, and signing and dating it.

#### **GREENFIELD VILLAGE**

## General

15,816 ft., uned. (1932-41)

Tourists in horse-drawn vehicles and on foot; pony-drawn carts for children: horse-drawn covered wagons, surreys, buggies, sleighs, and buses; buildings including Armington and Sims Machine Shop, Bagley Avenue Shop, Sir John Bennett Jewelry Store, Blacksmith Shop, Luther Burbank birthplace, George Washington Carver Memorial. Clinton Inn exterior and taproom, Cotswold Group, Currier Shoe Shop, Deluge Fire Engine Co., Edison buildings, Edison Institute, Henry Ford Museum, Stephen Foster Memorial, Gardner House, Hanks Silk Mill, Heinz House, Kingston Cooper Shop, Logan County Court House, Loranger Gristmill, Magrill Jewelry Store, Martha-Mary Chapel, McGuffey School, Miller School, Owl Lunch Wagon, Pioneer Log Cabin, Plymouth Carding Mill, Plymouth House, Sandwich Glass Plant, Secretary House, Scotch Settle-School. Slave Huts. Watchmaker's Chalet, Tintype Studio, Toll House Shoe Shop, Village Gatehouse, Town Hall, Village Post Office and Apothecary Shop, Village Print Shop, Waterford General Store, Noah Webster House, and Wright Homestead and Cycle Shop; interiors of many buildings with workers, and old-fashioned manufacturing processes and skills being demonstrated; items of interest, including a walkingbeam engine, floral clock, Ackley Covered Bridge, Cape Cod Windmill, and water wheel and stone mill; and Henry Ford with others looking over construction site and examining wooden patterns for machines.

# George Washington Carver Memorial 262 ft., uned. (July 21, 1942)

Dr. Carver and Henry and Edsel Ford at reception in laboratory and posing in front of George Washington Carver Memorial.

## Thomas A. Edison

# Smith's Creek Depot

214 ft., uned. (1928)

The depot at its original site and at Greenfield Village with old locomotives and trains on display.

# Lights Golden Anniversary and Dedication of Edison Institute of Technology

1,518 ft., ed.; 488 ft., uned. (Oct. 21, 1929)

President and Mrs. Herbert Hoover arriving by train, President Hoover and Thomas A. Edison leaving replica of baggage car in which Edison worked when 15 years old, train drawn by 1860 locomotive, Presidential motorcade from Fair Lane to Detroit City Hall, and President Hoover speaking from bunting-draped stand.

Edison and former assistant Francis Jehl in laboratory reenacting final steps of experiment leading to the invention of the incandescent lamp, while Henry Ford and President Hoover watch.

Sightseeing tour of Greenfield Village; and guests including Charles M. Schwab, Hon. Charles A. Eaton, Phelps Newberry, Fielding H. Yost, Sir Felix Pole, Adolph Ochs, Paul Kruesi, Will Rogers, M. S. Sloan, Miss Sarah M. Sheridan, Lee De Forrest, Julius Rosenwald, Daniel Beard, Charles Dana Gibson, and Gordon Rentschler.

# "Reminiscences of Menlo Park" 12,293 ft., ed., comp. (1932)

Francis Jehl, former assistant to Thomas Edison and custodian of the Menlo Park Group as reconstructed at Greenfield Village, explaining and demonstrating Edison's equipment and inventions.

Inventions: vote recorder; electric pens for stencil cutting; mimeograph; phonograph; fire alarm; incandescent lamp; several electric meters; Edison effect lamp, forerunner of the radio tube; electromotograph, an early form of telephone receiver; carbon resistor, a device offering electrical resistance and used in a circuit for protection or control; tasimeter, for detection of slight temperature variation; odoscope, for detection of delicate odors; galvanometer, for measuring a small electric current; deposition cells, for measuring current; and photometer, for measuring light intensity and fluctuation.

Improvements on inventions of others: stock ticker; typewriter; telegraph equipment including condensers, a translating telegraph system, automatic system using prerecorded messages on tape, and a telegraph sounder which was the forerunner of the telephone; vacuum pump; and directional and nondirectional antennas for wireless telegraphy.

Buildings: laboratory, office and library building, chemistry laboratory, machine shop, and glass house.

Furniture and equipment: an original chair, Edison's desk, Edison's instruments in a cupboard, Brandel vacuum pump and bell jar, carbonizing oven, microscope, hydraulic press for making graphite filaments, balances, telegraph key bookkeeper's desk, first generators, designer's office and tools, first electric light chandeliers, gas machine for lights before electricity, intricate blown-glass objects, musical instrument in attic bedroom, Edison's cubbyhole in laboratory where he napped or thought, organ on which man plays "Nearer My God to Thee" while boy pumps bellows, workers, and glassblower blowing light bulb.

# Spencer Tracy in Edison's Laboratory 2,444 ft., uned. (1939)

Spencer Tracy, Henry and Edsel Ford, and Francis Jehl in Edison's laboratory; and Jehl showing and explaining equipment and inventions to Tracy.

# Mickey Rooney and Premiere of Movie "Young Tom Edison"

907 ft., ed., comp. (1940); 299 ft., uned. (1939)

Mickey Rooney at Smith's Creek Depot operating telegraph key; children in locomotive of old train; Mr. and Mrs. Louis B. Mayer, Mickey Rooney, Henry and Edsel Ford, and Francis Jehl in Edison's laboratory; Jehl showing and explaining Edison's equipment and inventions; old train moving out of Detroit station, crowds at way stations along the route to Port Huron, Mrs. Carolyn H. Hughes (widow of Edison) boarding train, and Mickey Rooney operating Edison's printing press in baggage car; motorcade through crowds; Mrs. Hughes turning on 50,000-watt lamp at top of replica of Edison Memorial to be built at Port Huron; and the Mayers and Father Edward J. Flanagan at Desmond Theatre for premiere of "Young Tom Edison."

# Stephen Foster Memorial 1,324 ft., uned. (1934, 1935)

Henry and Mrs. Ford and Edsel Ford at dedication of Stephen Foster Memorial, house interior, and crowds on lawn and on riverboat *Suwanee* on "Suwanee River."

# Noah Webster House 5,769 ft., uned. (1936, 1937, 1940)

Scenes from dramas or pageants about Noah Webster and family and friends; house interior, kitchen, sitting rooms, dining room, and study; and Webster working on his dictionary.

# Wright Homestead and Cycle Shop 1,726 ft., uned. (1937, 1938)

Celebration in 1937 of the 34th anniversary of the Kitty Hawk, N.C., flight: crowds including Henry and Edsel Ford and Orville Wright at Wright house and Cycle Shop; ceremonies on stage under tent; people signing guest-book; aircraft at Ford Airport, including airliners, a 1920 de Haviland, and an autogiro; and a ceremony commemorating inauguration of airmail service.

Dedication of Wright Homestead and Cycle Shop; and Henry and Mrs. Ford, Edsel Ford, Orville Wright, and crowd at Wright house and Cycle Shop.

## Schools and Children

#### General

832 ft., ed. (1939); 12,161 ft., uned. (1927-30, 1932, 1934-40, 1942)

Greenfield Village Schools at Henry Ford Museum, Ann. Arbor House, Town Hall, and Secretary House; and McGuffey, Miller, and Scotch Settlement Schools.

Children arriving at school by bus; children leaving services at Martha-Mary Chapel; chemistry and physics experiments in laboratory; marching and dancing at 1936 graduation exercises; members of sophomore speech class performing, 1942; constructing stage set on gym floor; weaving with small hand looms; girls working in an office; children and teenagers cooking, eating, and washing dishes in a kitchen and setting a table in a dining room; children watching blacksmith shoe horse and watching glassblower at work; children sledding, skating, riding in horse-drawn sleighs, playing in snow and on lawns, marching, and dancing out-of-doors and indoors; football and baseball games; children participating in Easter egg hunts and egg races, and playing with rabbit; and Henry Ford opening school at Henry Ford Museum.

# Edison Junior Pioneers Field Day 397 ft., uned. (1934)

Field events: fire-starting contest, races, tug-of-war, a 10-man pyramid, artificial respiration demonstration, and wigwag demonstration.

# May Day Festivals

1,614 ft., ed. (1930, 1931); 397 ft., ed., comp. (1931); 7,381 ft., uned. (1930-32)

Events on fields and on open and covered stages; children marching

onto and off field; crowning May Queen, and Queen and attendants on throne and steps leading up to it; bands, orchestra, and a bagpiper; dances including Maypole, square, quadrille, scarf, hornpipe, Highland fling, Cschgobar, Slovak, Norwegian, and Swedish; singing; acrobatics and tumbling; baseball game; leapfrog; sackraces, hoopraces, and footraces; picnicking; and horse-drawn stage-coaches, wagons, carriages, and buses.

McGuffey School Celebration

4,576 ft., uned. (July 2 and 3, 1938)
McGuffey School opening and monument dedication: Mr. and Mrs.
Henry Ford, Mr. and Mrs. Edsel Ford, children, and spectators; exterior and interior views of school and furnishings; McGuffey readers; and fragmentary scenes from drama about pioneer life staged at Pioneer Log Cabin, showing details of cabin interior.

# Part III FORD MOTOR COMPANY





Charles A. Lindbergh at Ford Airport, Dearborn, Mich., 1927. Reel No. 200FC-390(a).



Ford coal mine, ca. 1921. Reel No. 200FC-214(b).



Ford coal mine, ca. 1921. Reel No. 200FC-214(b).



Coagulating latex, Ford rubber plantation, State of Pará, Brazil, 1931. Reel No. 200FC-1823.



Lumbering in the north woods, ca. 1935. Reel No. 200FC-1502.



Launching the ore freighter *Henry Ford II*, Lorain, Ohio, March 1, 1924. Reel No. 200FC-2579(f).



A minstrel show produced by Ford employees, Dearborn, Mich., ca. 1941. Reel No. 200FC-3301.



United Automobile Workers (UAW) organizers at the River Rouge Plant, Dearborn, Mich., ca. 1937. Reel No. 200FC-2583(a).



A 1906 Model-N Ford, ca. 1917. Reel No. 200FC-2563(b).



Test-driving a Model-T, ca. 1917. Reel No. 200FC-2563(b).



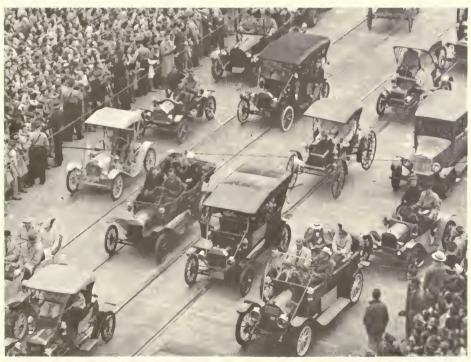
Model-T stuck in the mud, ca. 1917. Reel No. 200FC-2563(b).



Racer 999, built by Henry Ford in 1902, ca. 1920. Reel No. 200FC-2574.



Model-A climbing Ben Nevis, Scotland, 1928. Reel No. 200FC-304(c).



Parade celebrating the golden jubilee of the automobile, Detroit, Mich., 1946. Reel No. 200FC-3133(f).



Indians of Bolivia, 1939. Frame from a motion picture advertising Lincoln-Mercury cars. Reel No. 200FC-1588.



Indians of Argentina, 1939. Frame from a motion picture advertising Lincoln-Mercury cars. Reel No. 200FC-1588.

# Ford Motor Company – General 1916–54

This category consists of productions and contributory film about the history of the Ford Motor Company, its overall activities, and management meeting programs and company reports from 1916 to 1954. The collection contains 7.801 feet of edited, 35 mm., silent, black and white film; 17,151 feet of edited, 35 mm., composite, black and white film; 1,554 feet of edited, 35 mm., composite, color film; 15,118 feet of edited, 16 mm., composite, black and white film; 3,226 feet of edited, 16 mm., composite, color film; 12,808 feet of unedited, 35 mm., silent, black and white film: 1.767 feet of unedited, 16 mm., sound track only; and 15,222 feet of 35 mm, and 47,030 feet of 16 mm., duplicate film.

#### GENERAL ACTIVITIES

# MATERIAL CUTTING ACROSS ALL ACTIVITIES OF THE FORD MOTOR COMPANY

6,379 ft., ed., 35 mm., si., b&w. (1923, 1924, 1926, 1927, 1936); 10,267 ft., ed., 35 mm., comp., b&w. (1932, 1933, 1935, 1938, 1940, 1941); 1,554 ft., ed., 35 mm., comp., k. (1940); 1,327 ft., ed., 16 mm., comp., k. (1949); 10,856 ft., uned., 35 mm., si., b&w. (1921, 1924, 1926-32, 1935, 1938, 1940, 1941, 1946)

A film using animated wooden dolls, diagrams, and toy machinery to

illustrate materials and processes used in the manufacture of Ford cars.

Displays of materials, indicating sources; and maps of the world and segment maps pinpointing sources of raw materials and locations of plants, branches, and outlets.

Views of buildings and industrial activities in the Detroit area: the Bagley Avenue Shop, Mack Avenue Plant, Highland Park Plant, and the Lincoln Plant.

Buildings and industrial activities in the Dearborn area: Ford Airport and airplane plant, the Ford Engineering Laboratory, and the River Rouge Plant.

Village Industries: Green Island, N.Y.; and Waterford, Plymouth, Nankin Mills, and Phoenix in Michigan.

Plants in the United States: Kearney, N.J., Minneapolis, Minn., St. Paul, Minn., Hamilton, Ohio, Iron Mountain, Mich., Norfolk, Va., Buffalo, N.Y., Richmond, Calif., Summerville, Mass., Kansas City, Mo., Charlotte, N.C., Louisville, Ky., Jacksonville, Fla., Seattle, Wash., Dallas, Tex., and Long Beach, Calif.

Branches in the United States: Columbus (State not designated); New York, N.Y., Detroit, Mich., Washington, D.C., Oklahoma City, Okla., Dallas, Tex., St. Louis, Mo., and San Francisco, Calif.

Plants abroad: Cork, Ireland; Buenos Aires, Argentina; Copenhagen,

Denmark; Windsor, Ontario, Canada; Dagenham, England; Amsterdam, Holland; Strasbourg, France; Antwerp, Belgium; Mexico, D.F., Mexico; and Shanghai, China.

Nonmanufacturing activities: lumbering operations at Iron Mountain, Sidnaw, Mich.; a sawmill; iron mining at Iron Mountain, Mich.; coal mining at Twin Branch, W. Va., and in Kentucky; transportation on the Detroit, Toledo & Ironton Railroad, and by several ships and planes; and a rubber plantation in Brazil.

Manufacturing and products: cars, trucks, tractors, glass, rubber, coke, paper, steel, cement, benzol, ammonium sulphate fertilizer, and soybean plastics.

# **HISTORY**

DRAMAS AND DOCUMENTARIES 1,422 ft., ed., 35 mm., si., b&w. (1916-21); 417 ft., ed., 35 mm., comp., b&w. (1933); 996 ft., ed., 16 mm., comp., k. (1953); 1,952 ft., uned.,

comp., k. (1953); 1,952 ft., uned., 35 mm., si., b&w. (1919-26, 1935)

Histories of Henry Ford, the Ford Motor Company, mass production techniques, and the effect of cars on American life.

Henry Ford's birthplace, boyhood and dreams, young manhood and achievements: Bagley Avenue Shop and the building of the Quadricycle (1896); Henry Ford with Mrs. Ford driving the Quadricycle, with grand-children, camping, operating a steam engine, and driving tractors; and Ford homes, including the Square House (1889-91) and Fair Lane (1916 on).

Early assembly line scene with parts being assembled to a frame on sawhorses; a worker towing chassis along final assembly line; worker pushing car along track assembly line at Highland Park Plant as others assemble parts to it; Henry Ford Trade School boys in shop (started 1916); Fordson tractors (1917 and 1925) and demonstrations of uses of tractors: World War I manufacturing of Liberty engines (1917, 1918) and Eagle Boats (1918, 1919); commissary scenes (first one opened 1919); lumbering scenes (first timber tract 1920); coal mine buildings (first mine 1920); Henry Ford at the throttle of a Detroit, Toledo & Ironton Railroad locomotive (purchased in 1920); the Lelands and the Fords at the Lincoln Purchase Ceremonies (1922); Edsel Ford unveiling a tablet marking the site of the shop where Henry Ford built the Quadricycle; first V-8 (1932); and review of activities to 1953.

Early model car with a couple in it being towed along country road by a horse; Model-T's (1908-27) on mountain roads, on a high railroad trestle, and on a huge pipe; and a sequence from a Harold Lloyd comedy in which two policemen chase Mr. Lloyd in his Flivyer.

# MANAGEMENT MEETINGS AND REPORTS

#### MANAGEMENT MEETINGS

2,802 ft., ed., 35 mm., comp., b&w. (1952); 10,210 ft., ed., 16 mm., comp., b&w. (1949-53); 903 ft., ed., 16 mm., comp., k. (1953); 1,767 ft., uned., 16 mm., t. (1950, 1951)

Reports of the Mound Road Plant General Manufacturing Division, the Basic Products Group, the Ford Division, the Product Planning Committee, and the Parts and Equipment Division; a management improvement film, and a film illustrating Ford Motor Company contributions to the productivity of the United States; speeches explaining the decentralization of the Ford Motor Company; and speeches on Government control of industry and its effect on the Ford Motor Company.

# ANNUAL REPORTS

3,665 ft., ed., 35 mm., b&w. (1952); 4,908 ft., ed., 16 mm., comp., b&w. (1950, 1951, 1953)

Henry Ford II delivering the general progress reports for 1950-53.



# Domestic and Foreign Branches 1928–54

This category consists of views of domestic plants and their activities and of foreign branches, including views of the cities and areas in which they are located. Most of the footage of the foreign branches was taken in 1948 and 1949; that for England and Germany, however, covers a number of years, and the Japanese pictures were taken in 1928 and 1931. The collection contains 10,264 feet of edited, 35 mm., silent, black and white film; 11,490 feet of edited, 35 mm., composite, black and white film; 11,772 feet of unedited, 35 mm., silent, black and white film; 1,246 feet of unedited, 16 mm., silent, black and white film; and 2,926 feet of 35 mm. and 562 feet of 16 mm., duplicate film. Exceptions only to 35 mm., black and white film will be mentioned.

# DOMESTIC BRANCHES

# LONG BEACH, CALIF.

731 ft., ed., si. (1930)

Exterior and interior of building at its opening, baskets of flowers, show-room, and crowds; Ford Tri-motor airplane *Quick Silver* on field; Ford ship *Oneida* moving through drawbridge and docking, and Mayor Oscar Hauge of Long Beach welcoming Capt. A. J. Kaminiski; plant interior; enameling ovens; and Mayor Hauge getting into first car off assembly line.

# MINNEAPOLIS, MINN.

1,246 ft., uned., 16 mm., si. (1946)

Workers assembling padding and upholstery to seat-frame units.

# SEATTLE, WASH.

193 ft., uned., si. (1932)

Ford officials at a banquet, touring the warehouse and yard in cars, and walking through the plant.

# FOREIGN BRANCHES

#### **GENERAL**

3,096 ft., ed., comp. (1948); 1,511 ft., uned., si. (1930, 1948, 1954)

Ford plants and points of interest in the cities and countrysides. These are described in detail under the country in which each is located, and additional separable footage is listed for each.

#### ARGENTINA

673 ft., uned., si. (1948)

Bridge over a deep ravine in the Andes Mountains, and a map.

Buenos Aires: Avenida de Mayo, Plaza de Mayo, Casa Rosada (Government House), Avenida Alvear, Avenida Nuevo de Julio, Avenida Roque Saenz Peña, New Port, and South Basin and Ford plant; and plant facilities and industrial processes.

# **AUSTRALIA**

621 ft., ed., si. (1948)

Maps designating Ford plants.

Geelong: Corio Bay and Moorabool Street.

Sydney: Harbour Bridge and aerial view of the city.

Brisbane: aerial view. Perth: city scenes. Adelaide: city scenes. Plants at the above cities.

## **BELGIUM**

896 ft., ed., si. (1948)

Antwerp: the city from above looking toward the River Schelde, and plant facilities and industrial processes.

## **BRAZIL**

829 ft., ed., si. (1948)

São Paulo: panoramas; Matarazzo Building, Avenida Ypiranga, Martinelli Building, Banco do Estado de São Paulo Building, and Praca Patriarcha; and plant facilities and industrial processes.

## CANADA

621 ft., uned., si. (1948)

Windsor, Ontario: aerial view including Ambassador Bridge and the Detroit skyline, and plant facilities and industrial processes.

## CHILE

599 ft., uned., si. (1948)

Santiago: panorama from Santa Lucia Hill, Civic Center and La Moneda (Government House), and plant facilities and industrial processes.

## **CHINA**

(no date)

Residential area in Shanghai, with pagoda in the background.

# **DENMARK**

(1947)

Views of Copenhagen.

## **EGYPT**

486 ft., uned., si. (1949)

Sphinx and Cheops Pyramid.

Alexandria: Mosque of Mohammed Ali, and plant facilities and industrial processes.

#### **ENGLAND**

7,046 ft., ed., comp. (1936, 1937); 596 ft., uned., si. (1948)

London: business district, Lord Nelson Monument in Trafalgar Square, Tower Bridge draw span opening, the Tower of London from the Thames River, and the Houses of Parliament.

British Ford advertisement accompanied by songs by Gordon Little and Jenny Dean.

History of Ford in England: Hyde Park Corner, London (1896); Quadricycle and antique Fords; interior of Trafford Park works; ground breaking ceremonies at Dagenham Plant (1929); Lord Percy and Edsel Ford digging with silver spade: Dagenham Plant under construction; installing machinery at Dagenham; assembly lines; powerhouse, coke ovens, storage yard, foundry, blast furnace, rolling mill, and machine shop; first truck off assembly line (1931); cranes unloading freighter at jetty; Prince of Wales touring Dagenham Plant; and a 1932 Ford on display at Royal Albert Hall.

Ford car climbing Ben Nevis Mountain; truck climbing a steep hill in Wales; and several different cars climbing a Yorkshire hill, on country roads and test tracks, through snow and flooded area, in London traffic, and on race track.

Drama about a Ford dealer and how he increased sales.

Comparison of primitive measuring methods and tools and modern preci-

sion instruments and machinery: methods of arriving at several units of measure including a furlong, one hand, 71/2 heads, a cubit, a pace, and an ell; displays of old measuring instruments including a maltrule, a hemicycle, and Queen Elizabeth's mathematical instruments: a set of Johansson gages; displays of ancient gouges and axhammers; demonstrations of ancient drill and modern multiple drills; turbines generating electricity; water wheel and windmill; manually operated and machineoperated lathes; handworking of iron; automatic hammer; rolling mill; presses; and hand methods and machine processes in wheelmaking.

# **FINLAND**

702 ft., uned., si. (1948)

Helsinki: South Harbor, railway station designed by Saarinen, and the stadium for the 1952 Olympic Games; and plant facilities and industrial processes.

#### FRANCE

632 ft., uned., si. (1948)

Paris: business district, Left Bank near the Cathedral of Notre Dame de Paris, and a panoramic view with the Eisfel Tower in the background.

Poissy: street scenes, and plant facilities and industrial processes.

## **GERMANY**

3,516 ft., ed., si. (1930, 1935, 1948)

Map of Germany, showing British Zone.

Cologne: map; bridges over river with one in ruins, Cologne Cathedral, Town Hall, apartment house surrounded by ruins, and views of the city from moving streetcar; countryside; plant facilities and industrial

processes; and a worker's home and family.

#### HOLLAND

1,043 ft., uned., si. (1948)

Windmill.

Amsterdam: residential area, fishing boats in harbor, and canal; and plant facilities and industrial processes.

#### INDIA

582 ft., uned., si. (1948)

Bombay: Tata Road, Tardeo Street Depot, and plant facilities and industrial processes.

#### **IRELAND**

788 ft., uned., si. (1949)

Cork: City Hall, South Mall, Grand Parade, Patrick Street, University College, Shannon Church, St. Finn Barre's Cathedral, and Carrigrohane Straight Road; Blarney Castle with a boy kissing the Blarney Stone; and plant facilities and industrial processes.

# **JAPAN**

3,148 ft., ed. (in Japanese), si. (1928, 1931)

Tokyo: aerial views, and business district and Imperial Palace as seen through the Nijubashi Gate.

Yokohama: the city, and plant facilities and industrial processes.

#### MALAYA

648 ft., uned., si. (1949)

Map of Malaya.

Singapore: harbor and boats, business district, and plant facilities and industrial processes.

Countryside: tapping rubber tree, crepe rubber hanging from line, pineapple plantation, and a seawall.

## **MEXICO**

630 ft., uned., si. (1948)

Plant facilities and industrial processes in Mexico City.

# **NEW ZEALAND**

903 ft., uned., si. (1948)

Wellington: harbor and Hutt Road.

Hutt City: Post Office, Main Street, and plant facilities and industrial processes.

#### PORTUGAL

577 ft., ed., comp. (1948)

Lisbon: Lisbon Castle, Belém Tower, Jeronimos Monastery, Terreiro de Paco, Rua do Ouro, St. Justa Elevator, Rossio, Avenida da Liberdade, old section of city, Alfama Stairs, St. Rosa Stairs, Laura Elevator, building with mosaic ornamentation, Lisbon Cathedral, modern buildings and wide streets, Casa da Moeda, highway and bridge, narrow street, and Park Edward VII; and plant facilities and industrial processes.

#### SOUTH AFRICA

625 ft., uned., si. (1949)

Port Elizabeth: Main Street, City Hall Square, harbor, and plant facilities and industrial processes.

#### **SPAIN**

503 ft., ed., si. (1948)

Barcelona: skyline; aerial view; street scenes; Moorish-style building, square, and port area; and plant facilities and industrial processes.

#### **SWEDEN**

540 ft., uned., si. (1948)

Stockholm: skyline, fountain and cathedral, yacht basin, model of plant, plant construction, and plant facilities.

#### **URUGUAY**

771 ft., ed., comp. (1948)

Maps.

Montevideo: panoramas, and plant facilities and industrial processes.

# Nonmanufacturing Activities, 1914-54

This category contains film illustrating several of the nonmanufacturing activities of the Ford Motor Company and its employees over the years 1914 to 1954, including contributory industries, dealer-company activities, employee-company activities, product promotion, and safety education.

Contributory industries included in the collection are the Ford Airport, built in 1924; lumbering, begun at Iron Mountain, Mich., in 1920; mining, starting in 1920 with coal mines in Kentucky and West Virginia and phosphate mines in an unspecified location; a rubber plantation established in 1927 on the Tapajos River in Brazil and sold to the Brazilian Government in 1950; and shipping, beginning with the Detroit, Toledo, & Ironton Railroad, purchased in 1920 and sold to the Penroad Corporation in 1928, and expanded with the acquisition of steamships beginning in 1924.

Dealer-company activities and relations illustrated include conventions, trips, outings, and public service activities; advertising materials for dealer use; and suggestions for the improvement of sales and service.

Employee-company activities and relations illustrated are the Ford Motor Company Post of the American Legion; the English School, 1914 to 1922, an Americanization program for foreign-born employees; personal pictures of several company executives; gardening on plots set aside by the

company for employee use; recreational activities including picnics, Recreation Committee meetings, athletic activities, hobbies, music and drama, fairs, and day camps for boys; and union organizing efforts, strikes, contract signing (1946), and a union election.

Product promotion includes exhibits at fairs and expositions; advertising films for Ford airplanes, cars, and trucks, Fordson tractors, and Lincoln-Mercury cars; and promotion at special events such as the Indianapolis 500, stock car races, and a car rodeo.

Safety education deals with automobile driver and pedestrian training and research in automotive engineering; and fire, industrial, and water safety.

The collection contains 65,454 feet of edited, 35 mm., silent, black and white film: 67,203 feet of edited, 35 mm., composite, black and white film: 928 feet of edited, 35 mm., composite, color film; 1,193 feet of edited, 35 mm., sound track; 237 feet of edited, 16 mm., silent, black and white film: 4.815 feet of edited, 16 mm., composite, black and white film; 509 feet of edited, 16 mm., composite, color film; 245,822 feet of unedited, 35 mm.. silent, black and white film: 2.725 feet of unedited, 35 mm., sound track; 2,019 feet of unedited, 16 mm., silent, black and white film; 1,393 feet of unedited, 16 mm., silent, color film: 25 minutes of 25-inch, magnetic tape; and 112,092 feet of 35 mm, and 3.861 feet of 16 mm., duplicate film.

# CONTRIBUTORY INDUSTRIES

## **AIRPORT**

## General

4,890 ft., uned., 35 mm., si., b&w. (1925-29, 1941, 1942, 1945)

Airplanes on field, taking off, in flight, and landing; planes include a Dayton-Wright Cruiser, Stout allmetal Air Transport, and Ford allmetal Tri-motors; planes, mostly Stout transports or Ford Tri-motors, owned by Texaco, Standard Oil, National Air Transport, and Florida Airways; Boy Scouts unveiling memorial to Harry Brooks, killed in the Ford Flivver plane February 9, 1928; aerial views of airport; paratroop exercises and sham battle on field; and Henry and Mrs. Ford watching the dismantling of a mooring tower and a water tower at the airport.

# Airmail and Air Transportation Service

1,623 ft., ed., 35 mm., si., b&w. (1925); 3,104 ft., uned., 35 mm., si., b&w. (1924-27, 1929)

Initial airmail flight, February 1926: Henry and Edsel Ford helping to load mail sacks into plane; plane taking off; and United Airlines and PCA planes and pilots participating in ceremonies commemorating inauguration of Ford airmail service, with Henry Ford accepting plaque.

First air transportation service flight on April 13, 1925: workers sorting packages, loading truck, and picking up packages at Lincoln Plant; truck leaving River Rouge Plant; Ford Airport and buildings; Henry and Mrs. Ford and Edsel Ford helping to load all-metal Tri-motor plane Maiden

Dearborn; plane taking off, in flight, and landing at Chicago; delivering packages to Ford Branch, Chicago; and plane loading for return trip, taking off, and landing at Ford Airport.

Flights established between Dearborn and Cleveland, Ohio, July 1, 1925: loading roadster parts aboard plane, plane landing from Chicago run, Henry and Edsel Ford looking at plane, plane taking off and landing at Cleveland, and workers unloading roadster parts and assembling car on platform.

Biplane on pontoons delivering car parts to dock.

Stout Airlines Ford Tri-motor plane: passengers boarding, plane taking off, passengers in cabin, and ground below as seen from plane in flight.

# Commercial Airplane Reliability Tour for the Edsel B. Ford Trophy, and Balloon Races

706 ft., ed., 35 mm., si., b&w. (1925); 15,456 ft., uned., 35 mm., si., b&w. (1925-31)

Many views of Ford Airport and bunting-draped buildings, crowds, planes, and balloons; people including Henry Ford, Edsel Ford as official starter, Sen. James Couzens, William B. Stout, Henry Ford II, and Benson Ford; map indicating route of the 1,900-mile race; field at night and fireworks; band; small planes including the Ford Flivver plane piloted by Harry Brooks and a Briggs Dart in exhibitions of formation flying stunting; weighing in; planes being flagged off and landing; and a banquet after the race.

Planes and pilots: Travel Air planes, E. K. Campbell, "Chief" Bowman, and Walter Beech; Junker, Fred Melchior; Swallows, John Stauffer,

Earl Rowland, and E. A. Goff; Fokker, E. P. Lott; Carrier Pigeon, Casey Jones; Martins, Cy Codwell and L. B. Richardson; Ford Tri-motors, Richard G. Hamilton and Frank M. Hawks; most of the above makes and models of planes several times with unidentified pilots; a Fairchild with folding wings, Woodson Type 3A, Curtiss Oriole, Waco, Mercury, Ryan, Pitcairn, and Alexander Eaglerock 6: pilots with unidentified planes, including R. W. Schroeder and Nancy Hopkins; a flying boat with wheels on boat and pontoons on underwing: and a gyroplane or autogiro.

Many balloons on the ground, partially inflated, inflated, taking off, and in flight; dirigible moored over field, in flight, and landing on field; crowds and presentation of flowers to balloonists; and pilots and balloons, identified for 1925 race, including W. C. Naylor and Kenneth Warren in Skylark, Lt. Max Moyer and W. E. Huffman in S-1, Charles D. Williams, Jr., and Arthur G. Schlosser with Dr. George M. LeGallee in Detroit Flying Club balloon, J. A. Baettner and W. H. Mortan with H. W. Maxson in Goodyear IV (second place), and S. A. B. Rasmussen and E. J. Hill with S. A. Mitchell in The Highball II (winner).

# Dirigibles

1,675 ft., uned., 35 mm., si., b&w. (1926, 1927)

Dirigibles U.S.S. Los Angeles and RS-1 at the mooring tower of Ford Airport; tower elevator, mooring cables, ballast to tail of dirigible, helium cylinders piled on ground, and close-ups of the cabin and motors; people including Henry Ford, Henry Ford II, Rear Adm. William A. Moffett who was chief of the Bureau of Aeronaut-

ics, and Lt. Comdr. Charles E. Rosendahl of the U.S.S. Los Angeles; dirigible casting off from mooring tower and rising; and a dirigible entering a hangar.

# Helicopter Demonstrations

1,639 ft., uned., 35 mm., si., b&w. (1941)

Pilot Igor Sikorsky and several other men in turn demonstrating helicopter rising, landing, taking off, hovering, and in forward and backward flight.

People including Henry and Mrs. Ford, Henry Ford II, and Charles A. Lindbergh on speaker's stand.

# Visitors to Ford Airport

1,351 ft., ed., 35 mm., si., b&w. (1927, 1928); 1,830 ft., uned., 35 mm., si., b&w. (1926-28)

Comdr. Richard E. Byrd and Edsel Ford talking (1926); Spirit of St. Louis in flight, landing, and taking off; Charles A. Lindbergh greeted by Henry and Edsel Ford and boys from the Henry Ford Trade School; Mrs. Lindbergh (mother of Charles A.), Harry Brooks, Henry and Mrs. Ford, and Edsel Ford with Tri-motor plane, and plane taking off (1927); Bremen transatlantic flyers including Baron von Huenefeld, Maj. James E. Fitzmaurice, and Capt. Hermann Koehl with Edward F. Schlee, William S. Brock, Henry and Edsel Ford, and Mr. and Mrs. Herta Junkers at Ford Airport and River Rouge Plant (1928); and Sir George H. Wilkins with Edsel Ford at Ford Airport after Arctic flight (1928).

#### LUMBERING

6,400 ft., uned., 35 mm., si., b&w. (1917, 1920-23, 1925, 1926, 1935) Buildings and facilities at Camps Nos. 1, 2, and 4 at Iron Mountain; small towns, children, residential areas, and industrial plants; winter forest scenes; logging activities including felling trees, trimming and cutting logs into lengths, snaking logs, loading logs onto sleds and flatcars with block and tackle, moving logs to railroad, loading logs onto flatcars, and conveyor carrying logs from boom into sawmill; cutting lumber in sawmill; and lumberyard scenes.

## **MINING**

# Coal

2,146 ft., ed., 35 mm., si., b&w. (1923, 1924, 1927, 1928); 1,367 ft., uned., 35 mm., si., b&w. (1919-21, 1923)

Coal mining towns in Kentucky and West Virginia: schools and playgrounds, residential areas, and commissaries.

Mine buildings: tipple, power-house, machine shops, and scale house; hand- and cable-powered cars carrying miners; mule-drawn and electric coal cars; mining by machine; and shipping coal by railroad and ship.

Processes at River Rouge coke ovens: charging, discharging, and quenching; and shipping coke by freighter.

# Phosphate

1,685 ft., uned., 35 mm., si., b&w. (1920, 1922, 1927)

Open pit mines: railroad track system into mine, mining with picks and shovels and with huge steam shovels, dynamiting, mill buildings, and separation machinery.

## RUBBER PLANTATION

1,547 ft., ed., 35 mm., si., b&w. (1929, 1930); 962 ft., ed., 35 mm., comp., b&w. (1939); 27,990 ft., uned.,

35 mm., si., b&w. (1929-32, 1936, 1939, 1940, 1942)

Maps of Brazil indicating the Ford rubber plantation on the Tapajos River and the city of Belém on the Pará River.

Plantation scenes: jungle, river, docks, housing facilities for foremen and workers and their families, messhall, restaurant, schools, chapel, hospital, water filtration plant and pump house, commissary, cemetery, warehouse, shop, radio and telegraph room, offices, garage and yard, sawmill, rubber processing building, quarry, railroad system, airplane hangar and seaplanes, powerhouse under construction, road and bridge building, building construction, clearing jungle, planting and transplanting trees, tapping trees, spraying swamps, and coagulating rubber by primitive and modern methods.

Brazilian scenes: villages and towns, natives working and participating in recreational activities, domestic animals, Belém waterfront and business district, wild animals and reptiles in zoo and in native habitat, and displays of mounted butterflies and other insects.

#### SHIPPING

Detroit, Toledo, & Ironton Railroad 284 ft., ed., 35 mm., si., b&w. (1924, 1926); 4,806 ft., uned., 35 mm., si., b&w. (1920-23)

Passenger trains and freight trains passing through countryside and through small towns and industrial areas of cities, loading and unloading at passenger and freight stations, filling water tanks and coal cars at towers in yards, and yard engines shunting cars in yards.

Lima, Ohio, Locomotive Works:

workers replacing locomotive wheels, roundhouse interior with locomotives on and near turntable, turning locomotives on table and by crane, constructing and welding boiler, assembling and polishing locomotives, machinery and workers, and passenger car under construction.

# Steamships

388 ft., ed., 35 mm., si., b&w. (1931); 13,811 ft., uned., 35 mm., si., b&w. (1918, 1919, 1922-29, 1937)

Passenger ships, freighters, and tugs passing through drawbridges, swing bridges, an aerial ferry, and canals; views of lake and river shorelines from ships; freighters at docks including River Rouge docks; loading and unloading crates, cars, lumber, coal, coke, and ore; shipyard buildings, ships under construction, launchings, and crowds; ships including Cletus Schneider, Frontenac, Henry Ford II. Benson Ford, John W. Boardman. Onondaga, Lake Farge, Michigan, Green Island, Norfolk, James Watt, John A. Roebling, Grand Island, George G. Crawford, William F. Stifel, Queen, and William W. Wolf; maiden voyages of the Benson Ford and the barge SS Chester; the yacht Sialia in drydock; and ship's instruments, bridge, pilothouse, boilerroom, and radio room.

# DEALER-COMPANY ACTIVITIES AND RELATIONS

# CONVENTIONS, TRIPS, AND OUTINGS

5,872 ft., ed., 35 mm., si., b&w. (1926, 1932, 1937); 3,125 ft., ed., 35 mm., comp., b&w. (1936); 4,733 ft., uned., 35 mm., si., b&w. (1925, 1926, 1932, 1934, 1936, 1937, 1948); 1,754 ft., uned., 16 mm., si., b&w. (1946)

Many groups of Ford dealers from all over the United States touring Ford plants.

Second annual picnic of Indianapolis Ford dealers: events including beauty contest, kiddie car race, mostmileage-on-a-Ford contest, and long-distance visitor contest; and a Negro banjo group and a miniature train ride.

Dealers touring Greenfield Village and Henry Ford Museum.

Conventions (1936, 1946, and 1948): Ford executives with and addressing delegates, buffet at Detroit Coliseum, and some meetings and work sessions.

Ford dealers in Detroit to see 1937 car: presentation of Cape Cod Windmill to Henry Ford at Greenfield Village, and interview with Henry and Edsel Ford.

Merit Club touring Greenfield Village and cruising on the S.S. Seeandbee.

# PROMOTIONAL MATERIAL FOR DEALERS

6,757 ft., ed., 35 mm., comp., b&w. (1934, 1939); 392 ft., ed., 35 mm., comp., k. (1940); 1,279 ft., ed., 16 mm., comp., b&w. (1941); 150 ft., ed., 16 mm., comp., k. (1940); 1,757 ft., uned., 35 mm., si., b&w. (1934)

Drama about the development of the automobile and the history of a family owning and operating a Ford dealership over a period of 30 years.

Explanations and illustrations of features contributing to comfortable ride in 1940 Fords, including shock

absorbers, wheel bases, springs, and seats.

Story of Ford parts and service, including the training of servicemen and illustrations of special tools and equipment required for good service.

A day in the life of an imaginary Ford salesman.

## PUBLIC SERVICE ACTIVITIES

703 ft., ed., 35 mm., si., b&w. (1920); 1,110 ft., ed., 35 mm., comp., b&w. (1947); 2,193 ft., ed., 35 mm., t. (1948); 667 ft., uned., 35 mm., si., b&w. (1946)

Promotion for public support for dealer-sponsored Christmas basket distribution.

Appeals for dealer sponsorship of American Legion Junior Baseball Program: scenes from all-star game for 1946, Junior World Series, and other games; major league players including Bob Feller, Ray Mack, Dizzy Trout, Vern Stevens, Bobby Doerr, Whitey Kurowski, Peewee Reese, Danny Murtaugh, Sam Chapman, Barney McCosky, Mike Tresh, Virgil Trucks, Eddie Lake, Roy Cullenbine, and Buddy Hutchinson; and Paul H. Griffith, National Commander, American Legion, making appeal for support.

# SALES AND SERVICE IMPROVE-MENT MATERIAL

11,463 ft., ed., 35 mm., si., b&w. (1924, 1927-29, 1931, 1934, 1936, 1938); 7,752 ft., ed., 35 mm., comp., b&w. (1936, 1939); 1,129 ft., ed., 16 mm., comp., b&w. (1946); 2,352 ft., uned., 35 mm., si., b&w. (1919, 1924, 1928, 1930, 1935)

Contrasts between right and wrong methods of office and display room housekeeping; selecting, training, and supervising salesmen; sales techniques; followup inspections of new cars; recordkeeping systems; used car and truck sales techniques and decisions about which vehicles to recondition, which to sell as they are, and which to junk; and appearance and management of service garages.

# EMPLOYEE-COMPANY ACTIVITIES AND RELATIONS

## **AMERICAN LEGION**

673 ft., ed., 35 mm., si., b&w. (1935); 480 ft., uned., 35 mm., si., b&w. (1935)

Initiation ceremonies into Ford Motor Company Post 173 of the American Legion: color guard, prayer, speeches, drum and bugle corps, glee club, review, invocation, and oath taking.

#### **ENGLISH SCHOOL**

157 ft., uned., 35 mm., si., b&w. (1918) Classroom: professor lecturing and students talking and leaving building.

# EXECUTIVES AND FAMILIES, PERSONAL SHOTS

# Harry Bennett

1,599 ft., uned., 35 mm., si., b&w. (1928, 1937, 1938)

Harry Bennett at home, winter scenes at the Bennett home, and Harry Bennett and group of people on yacht and at baseball game in which men and women participated.

# Mrs. Ray Dahlinger and Son 2,112 ft., uned., 35 mm., si., b&w. (1926, 1927, 1934)

John Dahlinger (age 4) with his mother; participating in various recreational activities at home; acting as ring bearer at a wedding; group including the Ray Dahlingers cooking and eating out of doors; sulky racing; and John Dahlinger (age about 10) putting horse through trick routines such as kneeling, lying down, and getting up.

# Logan Miller

799 ft., ed., 35 mm., comp., b&w. (1952)

Lampoon on the life and career of Logan Miller on his retirement.

#### Charles E. Sorensen

591 ft., ed., 35 mm., si., b&w. (1919, 1931)

Henry Ford and Charles Sorensen; Sorensen family on yacht, watching sailboat races; and other views from yacht, including shoreline, *Henry Ford II* moving through raised bridge span, canal banks and locks, and fishermen and their catch in small boat.

#### **GARDENS**

455 ft., uned., 35 mm., si., b&w. (1932, 1948)

Workers and their families in gardens, garden produce, and exhibits and prizes.

#### RECREATIONAL ACTIVITIES

384 ft., ed., 35 mm., si., b&w. (1924); 717 ft., ed., 35 mm., comp., b&w. (1953, 1954); 6,536 ft., uned., 35 mm., si., b&w. (1920, 1934, 1935, 1938, 1941, 1946, 1948, 1954)

Picnic: ballroom dancing, old time dancing, tap dancing, and Charleston; playing horseshoes; races; and contest winner awards.

Winter outing at cabin in woods: snowball-fighting, roughhousing, and rabbit-shooting.

Recreation Committee meetings.

Indoor athletic activities: swimming events such as racing, diving, and a water ballet; boxing; wrestling;

weight lifting; fencing; bowling; and badminton, basketball, and volleyball games.

Outdoor athletic games and contests: baseball; tennis; horseshoes; golf; and target practice with rifles, slingshots, and bows and arrows.

Special activities: Photography Club and exhibit, Chess Club, Bridge Club, fly casting class, Stamp Club, Yacht Club, orchestra, ballroom dancing, chorus singing Christmas carols at Rotunda, drama, and variety shows.

Ford Fair: garden and canned goods exhibits and judging.

Day camp activities: boys enrolling, getting physical checkup by nurse, touring Rouge Plant, playing tag and baseball, and swimming.

#### UNION

8,053 ft., uned., 35 mm., si., b&w. (1937, 1938, 1941, 1946, 1947, 1950)

Battle of the overpass: police dispersing crowd and chasing them across railroad tracks and through field.

United Automobile Workers (UAW) organizers at the River Rouge Plant: men and women distributing leaflets and newspapers to workers entering and leaving plant, mounted and motorcycle police patrolling and opening lanes through crowds for cars and pedestrians to enter plant, police escorting men and women to paddy wagon, and women yelling and defying policeman.

Strike (1941): plant interior showing idle machinery and damaged and broken tools and machinery, pickets, crowds, and police.

John S. Bugas and UAW representatives signing contract (1946).

Union election (1947): lines of

workers outside small buildings across the street from union hall, and workers coming and going.

Supervisors strike (1947): picket lines at River Rouge and Highland Park Plants, and traffic to and from plants.

Pickets at entrance gate to Greenfield Village.

# PRODUCT PROMOTION

# EXHIBITS AT FAIRS AND EXPOSITIONS

**Auto Shows** 

2,213 ft., uned., 35 mm., si., b&w. (1949)

Ford show at Convention Hall, Detroit; show at Madison Square Garden with spectators including Benson Ford, Henry Ford II, and Fred Allen at Ford exhibits; motorcade of old cars on street; and motorcade of Fords, Mercurys, Cadillacs, and Oldsmobiles on street.

# California Pacific International Exposition, San Diego

935 ft., ed., 35 mm., comp., b&w. (1935); 6 ft., uned., 35 mm., si., b&w. (1935)

Aerial views of Balboa Park and fairgrounds; Roads of the Pacific exhibits with an old Spanish trail and illustrations of kinds of roads built in the California desert, in the mountains of Japan, and in Panama; Byrd Expedition exhibit; House of Japan; House of the Central American Nations; House of Pacific Relations; Norwegian House; Yugoslavian House; Queen Elizabeth's Court; Ford exhibit including entertainment in the Ford Bowl, illustrations of several industrial processes, and a

model of the Ford plant; and entertainment including Indians dancing, an Irish dance, a clown performing, midgets on a stage, and a Ferris wheel and other rides.

Stills of mission ruins and a highway along the seacoast; and aerial views of San Diego and of beaches, ocean, and ships.

# Chicago World's Fair and Ford Rotunda

3,069 ft., ed., 35 mm., comp., b&w. (1934); 1,142 ft., uned., 35 mm., si., b&w. (1934, 1937, 1938, 1953)

Aerial views of fairgrounds and Lake Michigan; several gardens in fairgrounds; Avenue of Flags with Scottish band in parade and Hall of Religion; buildings including Goodyear with blimp overhead, Travel Transport, General Motors. Chrysler Motors, Federal, Wings of a Century portraying historical drama about transportation, and Ford Rotunda; exhibits in form of villages, some with entertainment, including midget, Colonial, Spanish, Black Forest, English, Italian, Swiss, Belgian, Irish, Tunisian, Mexican, and Dutch; Paris exhibit in form of a ship; early steam locomotive and streamlined train on display; Byrd's South Pole ship at dock; prehistoric animal exhibit; and entertainment including a girl aerialist, an ice-skating performance, a ventriloquist with dummies, a sky-ride, and a children's playground with rides and a clown.

Ford exhibits: crowds around Rotunda and Henry and Edsel Ford arriving; huge globe inside Rotunda; relief map showing Ford Motor Company installations; exhibits including antique cars, rubber products used in cars, motors and motor parts, frame

with steering mechanism, wheels, model cement mill, Ford and Lincoln cars, Henry Ford Trade School, Bagley Avenue Shop, and Quadricycle; industrialized farm with a soybean-growing exhibit, a steam engine, and early farm machinery; and workers demonstrating Ford processes and machinery employed in the production of speedometers, laminated windshields, cast parts, patterns, V-8 engines, bolts, soybean plastics, plastic parts, gears, and axles.

Ford suppliers' exhibits: Stewart Warner Corp.; Timkin Detroit Axle Co; Detroit Gasket and Manufacturing Co.; Bendix Products Corp.; Houdaille Hershey Corp.; United Engineering and Foundry Co.; L. A. Young Spring and Wire Corp.; Motor Products Corp.; United Rubber Co.; Kelsey Hayes Wheel Co.; Briggs Manufacturing Co.; Thompson Products, Inc.; Shelton Looms; American Brass Co.; Anaconda Copper and Brass Products; Murray Corp.; Aluminum Co. of America; Champion Spark Plug Co.; and Essex Wire Corp.

People in Ford cars on elevated roadway, and Ford Amphitheatre with Detroit Symphony Orchestra playing.

Rotunda interior and exterior as reconstructed at Dearborn.

# Ford Exposition of Progress, New York

6,969 ft., uned., 35 mm., si., b&w. (1933, 1934)

Crowds and traffic in exposition hall.

Exhibit illustrating evolution of the car: Austin steam car (ca. 1900), Benz (1898 and post-1900), Olds (1899), Winton (1901), Cadillac (1902), Daimler (1908), Ford's racer 999 (1902), several models of Fords (pre-1903; original A, 1903; B, 1904; C, 1905; N and S, 1906; E and R, 1907; T, 1908; A, 1927; and V-8, 1933), and the 15-millionth Ford (the last Model-T, 1927) and the 20-millionth Ford (Model-A, 1931).

Ford suppliers' exhibits: J. T. Wing & Co., Alcoa Aluminum, Firestone, Kelsey Hayes, Murray, Hercules Powder Co., Howe Corp., RRA Corp. of America, Simonds Saws, Goodrich Safety Silvertons, Goodyear, and Standard Oil.

Other exhibits: plastics; V-8 and parts; carbon for motor brushes and a man playing xylophone made of carbon: carborundum: rubber: tire with an acrobat on a tightrope; the Quadricycle in replica of Bagley Avenue Shop; workers demonstrating industrial processes including shaping metal in a smithy, making dashboards, testing valves for heat resistance, weaving tubular fabric, welding bodies, assembling valve stems to pistons, and making speedometers; machines including those for gear cutting, core slitting, and metal polishing; and metal lathes and drills.

Entertainment: children singing, orchestra and band music, different types of dancing, and a group of hill-billy singers.

### Michigan State Fairs

1,592 ft., uned., 35 mm., si., b&w. (1923, 1925, 1926, 1932)

Models and murals depicting coal mining and samples of coal and coke, fertilizer processing, logging and samples of wooden parts in cars, and paper objects; exhibits of car engines, Quadricycle, cars, tractors, trucks, railroad locomotive, and a Tri-motor airplane; old vehicles on display, including wagons, covered wagons, bug-

gies, carriages, a stagecoach, and a locomotive; men trying to tip over cars tilted steeply by ramp under wheels of one side; a food and health exhibit; and a band concert.

#### New York World's Fair

1,327 ft., ed., 35 mm., comp., b&w. (1940); 201 ft., uned., 35 mm., si., b&w. (1939)

Aerial views of New York City, and George Washington Bridge and Manhattan Island.

Fairgrounds with aerial views and night scenes with fireworks; buildings including those of U.S. Steel, Westinghouse, U.S. Government, Goodrich, Chrysler, General Motors, Ford, and States of Maine and Florida; exhibit of streamlined trains; and amusement area including parachute jump, ski jump, dancers, ice skaters, and a souvenir stand.

Ford pavilion: under construction; Ford Day ceremonies with Edsel Ford and the five oldest Ford dealers in the United States; exhibits including the 28-millionth Ford, Henry Ford's first gasoline-powered engine, Ford cycle of production, and a mobile mural by Henry Billings; cars on ramps of "Road of Tomorrow" exhibit; garden court; theater with ballet, style show, and a movie; and amphitheater with Ferde Grofe directing the New World Ensemble.

#### Ford Airplanes

423 ft., ed., 35 mm., si., b&w. (1926-28); 1,755 ft., ed., 35 mm., comp., b&w. (1928); 794 ft., uned., 35 mm., si., b&w. (1926, 1929)

Demonstration flight of Ford Trimotor plane at Le Bourget, France, and at Barcelona, Spain: passengers deplaning and enplaning; and aerial views of airfields, river, waterfront, cities, and countryside.

Advertisement for combination train and air trips across the country: aerial view of New York City; Pennsylvania Station; maps of route of trip; towns along the route, including Columbus, Ohio, Indianapolis, Ind., St. Louis and Kansas City, Mo., Wichita, Kans., Waynoka, Okla., Clovis and Albuquerque, N. Mex., Winslow and Kingman, Ariz., and Los Angeles, Calif.; aerial views along the way, including countryside, mountains, desert, meteor crater, the Colorado River, Mojave Desert, and Mount Wilson Observatory; Charles Lindbergh inspecting plane and supervising flights; and Amelia Earhart greeting passengers at Los Angeles.

Tri-motor planes in Chile: passengers boarding plane; plane in flight over snow-covered Andes; and Iquique, Chile, airport, and aerial views of the city.

#### Ford Cars

11,562 ft., ed., 35 mm., si., b&w. (1917-25, 1927-29, 1931, 1932, 1934, 1936, 1937); 14,898 ft., ed., 35 mm., comp., b&w. (1932, 1934, 1935, 1937-41, 1947); 536 ft., ed., 35 mm., comp., k. (1939); 359 ft., ed., 16 mm., comp., k. (1948); 68,101 ft., uned., 35 mm., si., b&w. (1914, 1916-41, 1945, 1946, 1948, 1950); 796 ft., uned., 16 mm., si., k. (1946, 1954); 25 min., .25-inch mag. tape (1940)

Many parades, motorcades, and displays; Henry, Edsel, and Henry Ford II many times; early model Fords on display and being driven, including Quadricycle and 1903-7 models, and racer 999; plants including Mack Avenue, Highland Park, River Rouge,

and Village Industries; and manufacturing processes.

Model-T (1908-27): planetary transmission, Thermo-syphon cooling system, and splash lubrication; cars being driven along huge aqueduct pipe, on railroad tracks, down steep embankments, over rough terrain, on snowy mountain roads, and through deep mud; cars equipped for camping; illustrations of maneuverability, economy of operation, reliability, durability, stamina, and new features from year to year; illustrations by diagram, cutaway sections, and running demonstrations of moving parts; drama explaining the Ford Weekly Purchase Plan (1923); improvements for 1924, including dashlight, rearview mirror, and windshield wiper; experiment with radio receiver in car (1924); 10-millionth Ford (1924) motorcade trip from New York, N.Y., to San Francisco, Calif., through Jersey City and Trenton, N.J., Philadelphia, Gettysburg, and Pittsburgh, Pa., Ohio, onto Lincoln Highway at Nebraska-Wyoming line, Pine Bluff, Chevenne, and Laramie, Wyo., and Portland and Grants Pass, Oreg.; New Jersey Gov. George S. Silzer and Wyoming Gov. W. B. Ross; and 15-millionth Ford (1927).

Model-A (1927-31): sliding gear transmission, water pump, battery distributor ignition, safety glass windshield, hydraulic shock absorbers, and welding of major subassemblies; model-A climbing Ben Nevis Mountain in Scotland (1928); and owners with their Model-A's, including Thomas A. Edison, Fred and Dorothy Stone, Douglas Fairbanks and Mary Pickford, Dolores Del Rio, Dorothy Gish, Newton D. Baker, Irvin S. Cobb, Will Rogers, Sen. Frederick Hale and

Sen. James Couzens, Lester Maitland, and Our Gang Kids with their dog (1928).

Twenty-millionth Ford (1931) trip around the country: motorcades, bands, and ceremonies at points of interest: Wilson Dam at Muscle Shoals and the first White House of the Confederacy at Montgomery, Ala.; an old southern sorghum mill at Brinkley. Ark., and a football game between Ouachita Baptist College, Arkadelphia, and Arkansas State Teachers College at Conway, Ark.; Beach, the Pacific Ocean, Mission San Juan Capistrano, and a football game at Palo Alto, Calif.; Roald Amundsen's monument and ship, Market Street, City Hall, and a ferry at San Francisco: Lake Merritt at Oakland, Carquinez Bridge to Vallejo, the capitol at Sacramento, and Mount Shasta in California: Denver scenes including the capitol, business district, railroad yards, and the industrial district: the Royal Gorge of the Arkansas River in Colorado; several towns, the Martha Berry School at Rome, and ceremonies at Columbus, Ga., with Col. George C. Marshall, Jr., representing Ft. Benning, Ga.; Thomas Lincoln Cabin in Macon County, and Chicago, Ill.; Chicago lakeshore area, business district, park, and airport; circus wagons and elephants at Peru, Ind.; the capitol, American Legion National Headquarters, and speedway at Indianapolis, Ind.; Indiana Gov. Harry G. Leslie; the capitol at Des Moines, Iowa; Herbert Hoover's birthplace at West Branch, Iowa; horseback riders jousting at bags of sand and target-shooting from running horses, and the Mississippi River: Iowa Gov. Dan Turner; several cities and towns and a pioneer

pageant at a reconstructed stockade at Fort Harrod, Ky.; New Orleans, La., and the Chalmett Monument at site of the Battle of New Orleans: several towns in Michigan; the capitol and Fort Snelling at St. Paul, Minn.; Vicksburg National Park and the capitol at Jackson, Miss.; Mississippi Gov. Theodore G. Bilbo; City Hall at St. Louis, Mo.; the capitol at Lincoln, Nebr.; Nebraska Gov. Charles W. Bryan: tunnel blasting at Boulder Dam and a Labor Day parade at Las Vegas, Nev.; the capitol at Concord, N.H.; New York City Mayor Jimmy Walker; Niagara Falls, Mussolini's Italian students at McFadden Health Resort at Dansville, and the New University of Rochester in New York; the capitol at Bismarck, Fargo business district, Badlands scenes, Sioux Indians in ceremonial dress at Mandan, and rodeo events in North Dakota; the capitol at Columbus, Ohio; several towns and ranches and the capitol at Oklahoma City, Pawnee Indian Trading Post with Indians dancing, and Greater Seminole Oil Field in Oklahoma; Oklahoma Gov. "Alfalfa Bill" Murray; Klamath and Crater Lakes, Bridge of the Gods at Cascade Locks on the Columbia River, and the capitol at Salem, Oreg.; Providence, R.I.; Sylvan Lake, Needle Pass, and Black Hills Tunnel in the Black Hills of South Dakota; the capitol at Nashville and a ferry across the Tennessee River in Tennessee; Tennessee Gov. Henry H. Horton; Williamson Dam, the capitol at Austin, the Alamo, and a high school football game at Corpus Christi, Tex.; Texas Gov. Ross S. Sterling; the Moab Desert, the capitol, and Mormon Temple with President Heber J. Grant of the Church of Jesus Christ of Latter

Day Saints and Sen. Reed Smoot at Salt Lake City, Utah; Saltair at Great Salt Lake, Artesian Park at Ogden, and Zion National Park, Utah; the capitol at Montpelier, Vt.; Vista House at Crown Point on the Columbia River Highway, the capitol at Olympia, Peace Arch at Blaine, Eagle Falls, Rock Island Dam, an Oregon-Washington football game at the University of Washington at Seattle with President M. Lyle Spencer in attendance, and Mount Rainier, Wash.; Washington Gov. Roland Hartley: several towns in West Virginia; Sidney Smith and a statue of Andy Gump, Parker Pen Company Janesville, the birthplace of the Republican Party at Ripon, the capitol at Madison, and the Milwaukee business district in Wisconsin; and Wisconsin Gov. Henry A. Huber.

V-8 (1932): motor block cast in one piece; reopening of plant and prosperity drive with announcement of new V-8; Sparton Police Radio Cruisers for the Detroit Police Department (1932) and for the convention of the International Association of Chiefs of Police at Washington, D.C. (1934).

V-8's in durability and economy tests: being driven 33,000 miles in 33 days in the Mojave Desert, 10,000 miles in 12 days using Mobil Gas products, and 10,000 miles in 10 days using Phillips 66 products.

One-millionth V-8 (1934) and 2-millionth V-8 driven to San Diego (1935).

Drama about a honeymoon couple driving from Boston to San Diego Fair in a V-8: stopping at New York City, Niagara Falls, the River Rouge Plant at Dearborn, Pikes Peak, Zion National Park, Death Valley, and the San Diego Fair.

Twenty-five-millionth Ford (1936), a small dirigible used to advertise Fords (1937), hydraulic brakes (1939), press previews for several models, 29-millionth Ford presented to the Detroit Chapter, American Red Cross (1941), and a parade celebrating the 50th anniversary of the first Ford car (1946).

Experimental car XM-800 (1954).

#### FORD TRUCKS

331 ft., ed., 35 mm., si., b&w. (1931); 6,755 ft., ed., 35 mm., comp., b&w. (1935, 1937, 1938, 1940, 1941, 1950); 11,284 ft., uned., 35 mm., si., b&w. (1916-22, 1928-34, 1937, 1938); 541 ft., uned., 16 mm., si., k. (1937)

Trucks on display and in use, being test-driven, and in parades; early Model-T adapted with skis on front and dual rear wheels; models for all years, including pickup, panel, van, refrigerator, tank, tow stake body, passenger, sound, generator, expansion camper (opening and closing demonstration), ambulance, fire, and semitrailer; and trucks used in specific jobs including long distance freighting, quarrying, delivering coal, collecting garbage, ranching and farming, building dam at Fort Peck on the Missouri River, building roads, delivering food and other necessities to New York City at night, and fighting a fire in Chesaning, Mich.

Construction details illustrated by assembly lines, stripped down parts, and cutaway sections; and demonstrations of truck parts including chassis with steering mechanism and brake lines attached, wheel mounting with brake drum and mechanism exposed, motor details, cylinders, carburetor, ignition, transmission, suspension sys-

tem, fly leaves, and steering mechanism and worm gear.

Children getting into and out of school buses; buses of the Detroit Street Railway System on streets and entering and leaving tunnel to Canada; buses in garage being serviced, including such tasks as checking oil, testing brakes, repairing speedometer, repairing and testing engines, and washing; and instructions for bus operators, giving rules for inspection, safe driving, and making accident reports.

#### FORDSON TRACTORS

12,968 ft., ed., 35 mm., si., b&w. (1918-21, 1924, 1925, 1930, 1931); 2,060 ft., ed., 35 mm., comp., b&w. (1937, 1939, 1947); 25,990 ft., uned., 35 mm., si., b&w. (1917-31, 1933, 1935-38, 1940, 1941); 2,453 ft., uned., 35 mm., t. (1947, 1948)

Many exhibits, parades, and demonstrations of tractors and attachments.

Old-fashioned and tractor farming contrasted: tasks performed by hand with handtools, including chopping and sawing wood, harvesting wheat with a scythe and tying sheaves, planting corn and harvesting and husking it, operating corn sheller, planting and digging potatoes, and milking and churning; horse- and mule-drawn implements and vehicles including plows, binders, floats, wagons, disk harrows, and cultivators: tractor-drawn implements including plows, mowers, binders, seed drills, floats, planters, wagons, cultivators, harrows, ditch diggers, rakes, mulch and manure spreaders, corn harvesters, dredger, potato digger, beet harvesters, and combines; tractor-powered equipment including saws, hay balers,

threshing machines, silage grinders, silo fillers, corn huskers and shellers, spraying equipment, milking machines, cream separators, churns, shop machinery, pumps, and electricity generators; and tractors clearing land, including pulling stumps, snaking logs, and pulling rocks from fields.

Lumbering: tractor-drawn log sleds, wagons, and trailers; tractors snaking logs; tractor-powered saws and generators; tractor on railroad tracks hauling flatcars loaded with logs to boom; and tractor-drawn trailers of lumber in yard.

Roadbuilding: tractor-drawn gravel cars on railroad tracks; drag scoops preparing roadbed; tractor attachments including dirt loader, grader, and roller; trucks; concrete-leveling machinery; and mixers.

Other work performed by tractor power: tank and sweeper cleaning street; snowplows on streets and sidewalks and clearing snow from ice; hauling load of pipe to oilfield and operating winch at derrick; block and tackle moving scoops of sand from railroad car; winches, one operating elevator at construction site; hauling fire engine and providing power for pump; float smoothing racetrack between races; shovels loading coal into gondolas and excavating at building site; providing power for conveyor into icehouse; laying cable; mowing lawns; stretching wire along railroad right-of-way; laying large pipe in trench up mountain slope; interplant and intraplant hauling; and providing power for a merry-go-round and Ferris wheel.

Tractor manufacturing: parts casting and milling, engine and distributor assemblies, painting lines, and final assembly lines.

Testing: a tipping experiment on steep bank; test-driving an experimental three-wheeled tractor and several other models; testing metal; Xraying crankshafts; and testing, measuring, and inspecting parts.

Animated drawings illustrating in detail the operation of an internal combustion engine; and improvements, implements, and attachments, including the Ferguson hydraulic lift system, being explained and demonstrated.

#### LINCOLN-MERCURY CARS

1,872 ft., ed., 35 mm., si., b&w. (1924, 1940); 8,638 ft., ed., 35 mm., comp., b&w. (1936, 1939, 1940); 427 ft., ed., 16 mm., comp., b&w. (1939); 3,344 ft., uned., 35 mm., si., b&w. (1925, 1942, 1945, 1949)

Precision methods of building Lincoln cars: milling joint face for crankshaft bearing caps, grinding cylinder bore, machining flywheel, grinding cams, testing and balancing parts, assembling and testing motor, assembling and testing transmission, assembling car, finishing body, and roadtesting car.

Drama about a man and woman meeting after a 3-year separation, falling in love with each other and a Lincoln Zephyr, and leaving for a honeymoon in a Lincoln Zephyr.

A Mercury being driven from Lima, Peru, to La Paz, Bolivia, to Buenos Aires, Argentina, in 96 hours: map of route; buildings, monuments, residential area, exterior and interior of a palace, and the President of Peru at Lima, Peru; cobblestone streets, traffic, and monuments at Arequipa, Peru; Puno, Peru; Indians at open-air market and a public square at Juli, Peru; entrance gate, monuments,

churches, public buildings, and President Carlos Quintanilla at the capitol at La Paz, Bolivia; scenes in Argentina, including Tucumán business district, Córdoba, Villa María, Rosario, and Buenos Aires business district and a plaza; roads through the Andes Mountains and the countryside; Lake Titicaca on the border between Peru and Bolivia; and many Indians along the way dancing to drums and primitive pipes, herding llamas and donkeys and leading pack mules, at animal market in a village, plowing with ox-drawn wooden plow, washing clothes in stream, with muledrawn and donkey-drawn carts, and selling fruit at roadside.

New models and improvements in Lincoln and Mercury cars for 1941, 1942, and 1949; and demonstration driving of a Mercury especially equipped for use by multiple amputees.

#### RACES

#### Danish Ford Rodeo

1,188 ft., ed., 35 mm., si., b&w. (1931)

Heavy traffic on the way to the dirt track racing course, Copenhagen; sponsor Prince Knud on field and in stands; obstacle races over ramps, through improvised garage doors and narrow openings, through dry pits and pits filled with water, and around narrow turns; comic elimination race; ladies' balloon-breaking race; final race between the Danish winner and the Swedish and Norwegian champions with the Dane winning; and the presentation of a new Ford to the public door-prize winner.

#### Indianapolis 500

1,335 ft., ed., 35 mm., comp., b&w. (1934); 2,967 ft., uned., 35 mm.,

si., b&w. (1931, 1934-36, 1946); 56 ft., uned., 16 mm., si., k. (1954)

Indianapolis Speedway: parades including military units, bands, race cars, pace cars, and antique cars; crowds in stands and at track rail; starts, races, pit stops, judges' stand, and race progress boards; mechanics working on racers in shops; people including Bill Cummings (winner, 1934), Amelia Earhart as a spectator, and Henry Ford II in Lincoln pace car and in duster and goggles with costumed girls in antique car (1946); and racer 999 being driven around track.

#### Stock Car Races

Elgin, Ill.

1,072 ft., ed., 35 mm., comp., b&w. (1933)

Track, scoreboard, stands, and spectators; American Automobile Association contest board in car on track; Barney Oldfield, official starter; drivers including Dave Evans, Lou Moore, Bill Cummings, H. M. Lewis, Peter de Paolo, Wilbur Shaw, Fred Frame (winner with V-8), Jack Petticord, Ted Chamberland, Sam Palmer, and Harry Hunt; and views of the race and cars including Ford V-8, Dodge, Chevrolet, and Plymouth cars.

#### Gilmore-Yosemite, Calif.

490 ft., ed., 35 mm., comp., b&w. (1934); 1,958 ft., uned., 35 mm., si., b&w. (1938)

Drivers, mechanics, and officials posing; officials inspecting and sealing cars; drivers being weighed in; races through countryside and over mountain roads, checking stations along the way, finish in Yosemite National Park, and V-8 winner; drivers including Peter de Paolo, Wilbur Shaw, Chet Gardner, Stubby Stubblefield,

Fred Frame, Al Gordon, Rex Mays, Louis Meyer, and Babe Stapp; and cars including Ford V-8, Plymouth, Chrysler, Lincoln Zephyr, Hudson, Mercury, Overland, Pontiac, and Packard.

#### Pikes Peak, Colo.

532 ft., ed., 35 mm., comp., b&w. (1934) Views of race; drivers including Glen Schultz, Angelo Schmino, and Buss Hammon; and V-8 winner.

#### Unidentified Race

265 ft., uned., 16 mm., si., b&w. (1951)

Track, spectators, antique and modern cars parading, cars in pit area, starter on platform, start, pace car moving off track, and race.

#### SAFETY EDUCATION

#### AUTOMOBILE

#### General

1,578 ft., ed., 35 mm., si., b&w. (1922-25); 1,511 ft., uned., 35 mm., si., b&w. (1916-27)

Safety parades: mounted, motorcycle, and marching police; bands and bagpipers; marching units; decorated cars and trucks; floats; fire engines; school children; and boy scouts.

Heavy city traffic scenes.

Deputy Police Commissioner reporting on accidents; and illustrations of common careless acts of pedestrians, children at play, and drivers causing accidents involving cars and pedestrians, two or more cars, and cars and trains.

Kindergarten children learning by playing—controlling traffic at intersection drawn on floor.

#### Crash Research

907 ft., ed., 35 mm., comp., b&w. (1956) Art Fleming narrating illustrations of research by Cornell University scientists leading to development of safety steering wheel, safety door latch, padded dashboard and sun visor, seat belts, and hinged rear view mirror; 167-pound dummy being swung into steering wheel, and results with conventional and safety wheel analyzed; remote control crash and injury to dummies in car analyzed; and Henry Ford II explaining the crash research program at Cornell University.

### Driver Training

1,980 ft., ed., 16 mm., comp., b&w. (1951)

Illustrated instruction in driving under adverse conditions including fog, snow, rain, and ice, and driving by night and in hot weather; care of the car, including checking gas, oil, battery, cooling system, lights, tires, lubrication, ignition system, and brakes; and city driving.

#### National Good Drivers League

2,208 ft., ed., 35 mm., comp., b&w. (1940, 1941); 237 ft., ed., 16 mm., si., b&w. (1940); 1,096 ft., uned., 35 mm., si., b&w. (1940, 1941); 1,472 ft., uned., 35 mm., t. (1940)

Boys (1940) and boys and girls (1941) at national finals: events including psycho-physical tests, maneuver tests, parallel parking, parking in garage, emergency stop tests, eye examinations, color blindness and glare reaction tests, and complex reaction and drivemeter tests; award banquet with Edsel Ford, Capt. Eddie Rickenbacker, Linton Wells, Grantland Rice, Lefty Gomez, and Babe Dahlgren participating; and boys on sight-seeing trip around Manhattan Island by boat and at Radio City.

Grantland Rice comparing skills and attitudes necessary in sports to

those necessary for good driving: scenes from 1940 East-West Shrine football game; Coach Hollenberry and players including Nick Drahos, Frank Reagan, Tom Harmon, Tony Russell, Bill Johnson, Rudy Mucha, Paul Christman, Jim Kesselwood, Leon Gajecki, Tom O'Boyle, Bob Nelson, Jim Johnson, Tony Ruffa, Forrest Evashevski, Andy Marefos, and Dean McAdams; Marge Gestring diving; basketball game at Madison Square Garden; footrace; skiing; archery; and rowing.

#### FIRE

(From an industrial safety film.) Man waking to fire in bed, and instructions for turning in fire alarm at box.

#### INDUSTRIAL

8,392 ft., ed., 35 mm., si., b&w. (1920, 1922-26); 608 ft., uned., 35 mm., si., b&w. (1920, 1926, 1949)

Safety devices and equipment: protective clothing and equipment such as goggles, wristlets, armlets, leg guards, face shields, and special shoes; good light; guards at open manholes and excavations; double trip switches on presses; tongs for feeding presses and saws; saw guards; safety rods under hammers and presses when being serviced; shields against flying sparks from steam hammers, arc welding, and the like; exhaust systems in plants; firefighting equipment such as engines and blankets; automatic painting machinery; life belts; railings; steel sheathing for oxygen and acetylene tanks; fumigating chamber; danger signs, signal bells, and barriers to warn workers away from machinery being repaired, overhead work, furnace tapping, and the like; waterfilled well around explosives storage tank; rubber matting, insulated fences, and circuit breakers around electrical control board; and sanitary facilities.

Safety regulations for workers: way of wearing clothing, loading trucks and stacking boxes, carrying heavy objects, operating and servicing machinery, carrying and using tools, using scaffolding, operating cranes, using fireblankets, working on top of blast furnace, and obtaining prompt first aid.

Railroad safety precautions: time coordination, colored signal lights and flags, pedestrian walks over tracks, and signals at crossings.

Mine safety: miners in first aid class; rescue squad entering mine, giving oxygen to and carrying out unconscious miner; carrying caged canary into mine; and rock falling on miner from roof of tunnel.

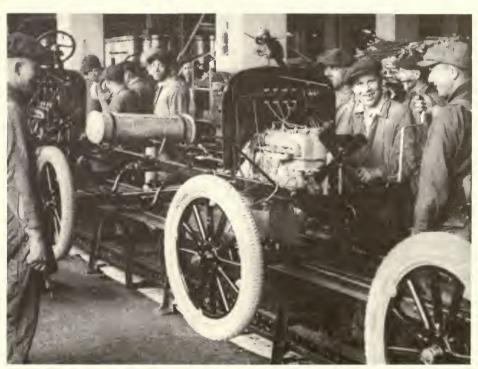
Explosives-handling experiments: illustrating tie rods necessary to hold an oven together; safety chain on oven doors; grinding wheel bursting speed, steel guard containing fragments, and safety motor cutoff; and acetylene-container tests using different thickness of pipe and kinds of seals.

#### WATER

(From an industrial safety film.) Water rescue and artificial respiration demonstrations.



Craneway at Highland Park Plant, Detroit, Mich., ca. 1916. Reel No. 200FC-2573.



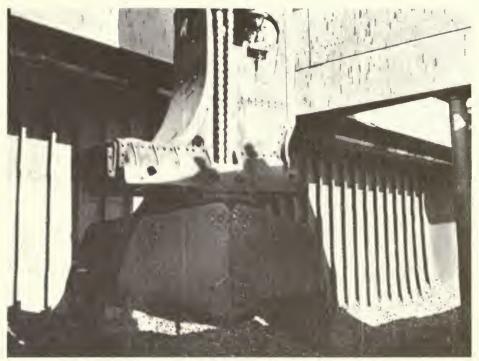
Final assembly line, Highland Park Plant, Detroit, Mich., 1924. Reel No. 200FC-2579(h).



Tapping the blast furnace, River Rouge Plant, Dearborn, Mich., 1921. Reel No. 200FC-238.



Casting motor blocks, foundry, River Rouge Plant, Dearborn, Mich., 1926. Reel No. 200FC-4043.



Unloading coal from the hold of a freighter, River Rouge Plant, Dearborn, Mich., 1927, Reel No. 200FC-1275.



Pouring glass onto rolling table, Glassmere, Pa. Frame from a film about the glass plant, River Rouge Plant, 1928, Reel No. 200FC-4058(Reel 1).



Engine assembly line, River Rouge Plant, Dearborn, Mich., 1926. Reel No. 200FC-4044.



Hot steel ingot in the soaking pit, steel mill, River Rouge Plant, Dearborn, Mich., 1926. Reel No. 200FC-4044.



Bloom mill, River Rouge Plant, Dearborn, Mich., 1926. Reel No. 200FC-4044.



Stamping plant, River Rouge Plant, Dearborn, Mich., 1926. Reel No. 200FC-4044.

### Plants, 1906-56

The material in this category illustrates the activities of the various Ford Motor Company plants in the Detroit-Dearborn area, the Village Industries, and several companies supplying materials to them. The Mack Avenue Plant, the home of the company from 1903 to 1906, was succeeded in 1907 by the Highland Park Plant, which has been in continuous operation since. The Model-T was assembled at Highland Park from 1908 to 1927 when, with the introduction of the Model-A, the assembly plant was moved to the River Rouge Plant. The Henry Ford Trade School, located at Highland Park in 1916, was moved to the Rouge in 1930 and closed in 1952. Fordson tractors were first manufactured in 1917 at the tractor plant at Brady Street and Michigan Avenue. The tractor assembly was moved to the B Building at the Rouge in 1921, to Cork, Ireland, in 1928, and, in 1933, to Dagenham, England, where tractors are still made. Since 1945, tractors have also been produced at Highland Park. Manufacturing activities began at the Rouge with the building of the Eagle Boat plant during World War I, and the plant has since grown to a huge industrial complex that produces virtually every type of material used in the manufacturing of cars, trucks, and tractors, as well as a number of byproducts. A number of Ford contributory industries and plants outside of the Detroit area are included in the Rouge material, but they are described in detail elsewhere in this guide. Many prominent persons, often accompanied by the Fords, were photographed touring the Rouge.

The Village Industries, begun in 1919 and disposed of beginning in 1946, were located mainly along the Rouge, Huron, Raisin, and Saline Rivers in Michigan, although one was built as far away as New York. These were small-parts plants drawing on local labor forces.

The Ford Airport and a plant to manufacture the Stout all-metal Air Transport were built near the Rouge in 1922. Ford bought the company in 1925 and, from 1926 until 1932, produced the Ford all-metal Tri-motor plane.

The Lincoln Plant was purchased in 1922.

The collection contains 38,325 feet of edited, 35 mm., silent, black and white film; 14,741 feet of edited, 35 mm., composite, black and white film; 376 feet of edited, 16 mm., silent black and white film; 460 feet of edited, 16 mm., composite, black and white film; 110,568 feet of unedited, 35 mm., silent, black and white film; 516 feet of unedited, 16 mm., silent, black and white film; 843 feet of unedited, 16 mm., silent, color film; and 25,905 feet of 35 mm. and 1,106 feet of 16 mm., duplicate film.

#### AIRPLANE PLANT

### FORD ALL-METAL TRI-MOTOR AIRPLANES

4,242 ft., ed., 35 mm., si., b&w. (1926-28); 5,459 ft., uned., 35 mm., si., b&w. (1926-29, 1931, 1932)

Aerial views of plant, hangars, and airport.

Manufacturing processes: inspecting sheets of aluminum; running sheets through corrugating press; heat treating metal; stamping out shapes with press; welding gas tanks; inspecting parts; riveting metal panels to fuselage and wing sections; attaching wings to plane; installing landing gear and wing engines; upholstering and installing seats; spray painting; and inspecting finished planes, including cockpit and controls, engines, and tail assemblies.

Testing: test flights with planes taking off, in flight, and landing; test flight of Tri-motor on pontoons on Detroit River; motor testing; and manometer tests to determine wing stress on planes in flight.

Henry and Edsel Ford and William B. Stout with several planes, Charles A. Lindbergh with the *Spirit of St. Louis*, passengers buying tickets and boarding Tri-motor plane, plane taking off and in flight, aerial views of countryside and interior views of plane and passengers, a small experimental plane in flight and on exhibit at airshows, dirigible at mooring mast, biplanes, and an autogiro.

#### HIGHLAND PARK PLANT

#### FORDSON TRACTORS

746 ft., uned., 16 mm., si., k. (1956)

Automatic gear stamping press, engine block drilling machine, auto-

matic painting machine, and cylinder liner and reamer; final assembly including attaching rear wheels and installing engines, engine covers, and hydraulic pumps; testing the hydraulic lift mechanism; and gaging engine blocks with calipers.

#### HENRY FORD TRADE SCHOOL

6,238 ft., ed., 35 mm., si., b&w. (1924-27); 934 ft., uned., 35 mm., si., b&w. (1922, 1925-28)

instructors, and stu-Buildings, dents: class schedules for the 4year course; classroom instruction including courses in mechanical drawing, mechanical science, mathematics, physics, metallography, and chemistry; demonstrations of safe and proper use of machinery; school foundry with boys performing various tasks; machine shop and students using machines such as lathes, metalworking and planing machines, and drill presses; car service department with students learning techniques of car repairing and of testing car parts; students at River Rouge observing actual industrial processes; students receiving pay and in dining hall; students participating in recreational, social, and school government functions; activities relating to the publication of the school paper The Artisan; athletic pursuits including football games with other schools; and boys going by bus to Ford Airport to see Charles A. Lindbergh.

#### MODEL-T CARS AND TRUCKS

1,496 ft., ed., 35 mm., si., b&w. (1916-19); 334 ft., ed., 35 mm., comp., b&w. (1927); 3,138 ft., uned., 35 mm., si., b&w. (1916-20, 1924-27)

Scale model of plant, yard, powerhouse and gasteam type engines for Plants 85

generating electricity, and craneway in multistoried room with loading bays at all levels.

Manufacturing processes and assembly; cutting worm gears; milling crankshafts and engine blocks; shaping body parts in presses; making windshields, wheels, and gas tanks; riveting frames; winding magnetos; assembling radiators, pistons, engines, motor units, and dash units; motor blocks and body parts on conveyors; assembling spindle connecting rod, spring and radius rods, and front and rear axle units; attaching wheels; attaching motor unit and steering column to frame; attaching shields and running boards, body, radiator, hood, gas tank, and dash unit to car; and painting cars.

Testing springs, crankshafts, gas tanks for leaks, and radiators; test-driving Model-T's through sand, on bumpy roads, on very muddy roads, and on hilly roads; and Model-T's fording streams.

#### LINCOLN PLANT

#### LINCOLN PURCHASE CEREMONY

1,976 ft., uned., 35 mm., si., b&w. (1922)

Henry and Mrs. Ford, Edsel and Mrs. Ford, Henry M. Leland, and Wilfred and Mrs. Leland at the Lincoln Motor Company transfer ceremonies; the group outside and inside the Lincoln Building; check signing and contract signing ceremonies; Henry Ford, Henry M. and Wilfred Leland, and others in dining room of Lincoln Motor Company, and Henry M. Leland receiving a birthday cake and a statue of Abraham Lincoln.

#### LINCOLN CARS

7,442 ft., ed., 35 mm., si., b&w. (1928); 2,014 ft., uned., 35 mm., si., b&w. (1922, 1924, 1928)

Illustrations of the extreme care taken in the production of the precision-built Lincoln, including motor assembly and testing; final assembly, inspection, and testing; and the making, measuring, and testing of parts.

#### MACK AVENUE PLANT

#### THE PLANT

11 ft., uned., 35 mm., si., b&w. (1906) Picture of the building only.

#### RIVER ROUGE PLANT

#### **GENERAL**

9,130 ft., ed., 35 mm., si., b&w. (1920, 1922, 1925-27, 1932); 10,440 ft., ed., 35 mm., comp., b&w. (1932, 1936, 1937, 1939, 1940-42, 1946); 376 ft., ed., 16 mm., si., b&w. (1936); 460 ft., ed., 16 mm., comp., b&w. (1951); 13,660 ft., uned., 35 mm., si., b&w. (1917-19, 1922, 1925-31, 1935-39, 1948, 1952); 516 ft., uned., 16 mm., si., b&w. (1951)

This footage consists of reels and parts of reels of film cutting across the activities of the River Rouge Plant, including car and tractor manufacturing from ore to finished product, and it is described in the specific terms listed below. The footage and dates for film separable in these terms are listed under the individual items.

## BLAST FURNACES AND FOUNDRY

2,483 ft., uned., 35 mm., si., b&w. (1921, 1948)

Animated diagram of charging, firing, and tapping a blast furnace;

cable cars moving to top of furnace; hoppers for charging on top of furnace; running of slag into ladle cars and dumping; tapping; pig iron running into ladle cars and through troughs into molds; and stopping the notch with a mudgun.

Molten iron being poured from buckets on cranes into foundry furnace; mechanical stoker; workers making sand cores for cylinder block molds; molds on conveyor; molten iron from foundry furnace flowing into crane-handled pouring ladles; iron pouring into molds on conveyor; workers breaking cores from and inspecting castings; and machinery for milling, drilling, and measuring tractor and car engine blocks, cylinder heads, and transmission cases.

#### BYPRODUCTS PLANTS

#### Cement

Workers loading bagged cement into trucks and onto flatbed trailers.

#### **Fertilizer**

786 ft., uned., 35 mm., si., b&w. (1920, 1922)

Processes in fertilizer manufacturing: grinding, weighing, and mixing ingredients; ingredients in vats; furnaces; workers in face masks moving fertilizer by wheelbarrow; and filling and tying sacks and loading them into trucks.

#### **COKE OVENS**

1,014 ft., uned., 35 mm., si., b&w. (1927, 1928)

Railroad train, loaded with coal, moving through countryside; charging of a coke oven as seen from above; discharging coke oven; car of flaming coke moving under quencher; and coke dumped into sorter, through sorter onto conveyor system over automatic weighing system, and into the hold of a ship and into railroad gondolas.

#### FINAL ASSEMBLY BUILDING

329 ft., ed., 35 mm., si., b&w. (1937); 2,379 ft., uned., 35 mm., si., b&w. (1929, 1930, 1932, 1935, 1947)

Subassembly lines and processes: frame, including drilling holes, riveting, and arc welding; wheel, including welding spokes to hub and rim; and body, including placing stamped pieces in jig and welding, sanding, painting, and drying in baking oven.

Final assembly: conveyors carrying tires, rear-end assemblies, grills, springs, engine assemblies, carburetor assemblies, and glass to final assembly lines; wiring installed in chassis; engine drop; carburetor, fan and belt, radiator, bumper, wheels, grill, fenders, and headlights added; body drop; glass installed; wheels and headlights aligned; hood put on; dashboard and upholstery installed; and models for many different years.

Tractor assembly: engine attached to chassis, steering wheel installed, radiator and gas tank installed, and painting and inspecting finished tractors.

#### **GLASS PLANT**

584 ft., ed., 35 mm., si., b&w. (1926, 1928); 1,195 ft., ed., 35 mm., comp., b&w. (1937); 6,774 ft., uned., 35 mm., si., b&w. (1918, 1920, 1926-30, 1946)

Contrasting glassmaking techniques at the Glassmere Plant with those of the River Rouge Plant:

Glassmere: machinery for crushing and mixing ingredients, potters making huge clay pots, worker behind protective shield using crane to place pot with glass ingredients into furPlants 87

nace, removing pot the same way, hand-skimming pots of molten glass, pouring glass on moving belt and spreading it with roller, workers embedding sheets of glass in plaster of paris and dancing on it to remove air and water bubbles, and grinding and polishing glass by machinery on circular table.

River Rouge: washing, screening, and drying sand by machine; weighing, mixing, and pressing glass ingredients into briquettes; charging the arc furnace; worker taking test sample from furnace and blowing bulb; rolling glass by machine; glass moving through huge annealing lehr; workers moving glass with huge suction crane; embedding glass in plaster of paris by machine; grinding and polishing glass by machine; washing and inspecting glass; cutting shapes by machine; laminating windshields and windows; and installing glass in cars.

Testing glass by swinging weights against car windows, dropping heavy objects on glass panels in horizontal frames, and shooting windows out with rifle; and Ford and Chevrolet cars after collision, showing Ford windshield cracked and Chevrolet windshield shattered.

#### HENRY FORD TRADE SCHOOL

895 ft., uned., 35 mm., si., b&w. (1938, 1942)

Boys at work in shop using metal lathes, planes, and drill presses.

## METAL MACHINING AND ENGINE ASSEMBLY BUILDING

1,518 ft., ed., 35 mm., si., b&w. (1925, 1933); 2,092 ft., uned., 35 mm., si., b&w. (1925, 1926, 1929, 1932, 1933)

Processes in the making of a broach: turning, welding, preheating in a small furnace, annealing in a large furnace, shock testing, straightening in a press, milling, hardening, cooling, testing, finishing, and conducting final inspection; and finished broach in use.

Metalworking processes: machining, polishing, measuring, and testing crankshafts; turning, machining, polishing, measuring, and testing camshafts; cutting and polishing gear teeth; and polishing, finishing, weighing, and pairing pistons into sets.

Car and tractor motor assembly: assembling camshaft and crankshaft to block, installing pistons, attaching flywheel to crankshaft, adding the headand front-plate cover, and placing completed engine assemblies on conveyors; placing differential and transmission assembly into housing; and testing completed motors.

History of the development of lathes, Lucas-type boring machines, and milling machines.

#### **OFFICES**

Workers using typewriters and checkwriting machinery, and workers filing past paymasters' windows.

#### PAPER MILL

Paper coming off a roller, and a machine cutting patterns from paper.

#### PLANNING DEPARTMENT

Drafting room and workers at drawing boards; and patternmakers working on models of different parts of cars, and showing Robert Boyer, Research Director, and Henry Ford a mockup of a machine for extracting soybean oil.

#### PLANT YARD AND SURROUNDING AREA

Aerial views of the Detroit-Dearborn area and industrial districts and countryside, the test track, and Greenfield Village; and streetcar, automobile, and pedestrian traffic and the parking lot outside the plant.

Many ships, including the Benson Ford, the Henry Ford II, and the Montezuma, at dock with huge cranes loading and unloading coal, ore, crates, and coke; and heavy earthmoving equipment repairing cracks in the canal bank.

Crane moving on overhead track from dock to coke ovens over ore, coal, and limestone storage bins; conveyors and pedestrian overpass systems between buildings; steam and electric locomotives moving freight trains, ladle cars with slag and molten iron, and flatcars with steel ingots; tractor-drawn train of lunch wagons entering a building; ladle cars dumping slag; and cooled slag being loaded into freight cars by steam shovel.

Building construction sites: Henry and Mrs. Ford, Edsel Ford, and Charles Sorensen; building materials; scaffolding; workers with handtools; and power shovels.

Construction of the service tunnel under the turning basin (1936): sinking the shaft; pouring the concrete lining, with crane lifting buckets of concrete; lowering the shield into the shaft; placing prefabricated iron lining blocks into place with a hydraulic erector arm; and the steel form for the inner lining.

#### PLASTICS PLANT

695 ft., ed., 35 mm., si., b&w. (1936); 1,979 ft., uned., 35 mm., si., b&w. (1930, 1932, 1936-39, 1941, 1942)

Soybean processing plant under construction, and floor and machinery setup in finished plant.

Soybean processing: extracting oil by percolation, separating oil and solvent by distillation, cooling solvent in tube condenser, and controlling vapor pressure in still and steamer by jet condenser.

Henry Ford and Robert Boyer in plant, press making small plastic parts, Boyer repeatedly hitting plastic car with sledge hammer but causing no damage, and plastic car on display.

Firemen fighting fire at soybean plant.

#### **POWERPLANT**

4,064 ft., uned., 35 mm., si., b&w. (1919, 1929, 1930, 1932, 1939)

Henry Ford and a group touring the powerplant (1919), and turbines and the central switchboard.

Water tunnel construction (1929, 1930): steam shovel breaking ground, workers pushing mine cars into and out of tunnel, huge liner pipe being sunk, crane removing large rotary blade from excavation and lowering it again, dirt being removed from excavation by bucket on crane, crane lowering lining blocks into excavation, hydraulic erector placing prefabricated lining blocks into ceiling of tunnel, Henry and Edsel Ford inspecting tunnel and powerplant, and finished tunnel interior and control gates.

Steam generator and turbine under construction: rows of electric meters, control board, turbine controls, generator room with four large generators, generator reheater and steam turbine with valves on top, a large circulating pump, and Henry and Edsel Ford at starting ceremonies of a new generator (1939).

Plants 89

### RUBBER PROCESSING PLANT

10,593 ft., uned., 35 mm., si., b&w. (1927, 1929-31, 1939, 1941, 1942)

Rubber processing: unloading bales of raw rubber from ship at dock onto conveyor into plant; placing open bales into cutting machine and chunks of rubber coming out; raw rubber moving through preheat oven, through plasticizer, and under a water spray; and chemical bins, mixer, and rolling machinery.

Tiremaking processes: making thread by machine; moving casing cord from creel room, and through latex dip and drying oven; moving fabric through calendering machine; coating steel wire with rubber and wrapping it with fabric; wrapping layers of rubber on casing fabric around revolving drum; shaping tractor and car tires in presses; debagging by machine; spraying by machine; inspecting finished tires; and putting tubes into tires and inflating them.

Displays and demonstrations of rubber products: surgical gloves, baby pants, swimming caps, and waders.

#### **SCRAPPING**

10,746 ft., uned., 35 mm., si., b&w. (1926, 1927, 1929, 1930)

Tugs towing ships to dock, drydock rising as ship is scrapped, and sinking back into water.

Scrapping processes: cutting ships' sides with acetylene torches and a cutting tool attached to a crane, breaking up the deck with pneumatic hammers, and dismantling a pilothouse and machinery; cranes removing boilers from ship and placing them on flatcars and placing engines on dock; and cranes removing rudders, screws,

boxes of chains, lifeboats, mast, and pieces of deck and sides.

Stacks of ship parts, equipment, gear, furniture, and plumbing fixtures on dock; railroad cars loaded with scrap; and partially scrapped ship, engineroom, empty hold, and screw shaft housing.

Lumber salvaging processes including pulling nails, sawing in a sawmill, and removing hardware from doors; pipe salvaging processes including water pressure tests and cleaning; large press crushing scrap; electromagnetic crane moving scrap to a conveyor; and large machine cutting sheet scrap.

Model-T's arriving at plant by truck, being stripped of such parts as tires and engines, and having bodies cut off with acetylene torches; wreckage being crushed by presses; and scrap being placed into open hearth furnace.

#### SHIPPING DEPARTMENT

Stacks of crates, and crates on conveyor.

#### STEEL MILLS

314 ft., ed., 35 mm., si., b&w. (1927); 2,373 ft., uned., 35 mm., si., b&w. (1922-24, 1926 1927, 1930, 1932, 1937)

Charging an open hearth furnace: molten pig iron pouring from mixer into crane-handled ladle and from ladle into furnace, electro-magnetic crane moving scrap steel into conveyor, scrap being placed into furnace, worker taking a small test sample from furnace, and molten steel pouring from furnace into crane-handled bucket and from bucket into ingot molds.

Bloom mill: crane lifting molds from ingots, trainload of ingots, crane removing ingots from soaking pit and placing them on conveyor to bloom mill, and machines rolling hot ingots into rods and bars.

Rolling mill: hot and cold rolling machinery, sheets of steel, and steel pipe coming out of coiler.

Casting crankshafts, and a large machine for removing sand core from cast-steel pipe.

Heat-treating spring leaves in electric furnaces; forging steel; heating steel billets in electric forging furnaces; workers removing billets and placing them in chutes in presses; crane handling hot metal, placing it in press, removing it, and turning and replacing it in press; and forging ring gears and crankshafts and shaping frame rails in presses.

Presses stamping out body parts and shaping gas tanks in stamping plant.

#### SUPPLEMENTARY ACTIVITIES

Maps of world showing Ford property locations and of the Great Lakes area showing Ford holdings of raw material resources and plants.

Ford installations in the Detroit-Dearborn area, including Lincoln-Mercury Building, the Rotunda, and Ford Airport and planes; and installations outside of the Detroit-Dearborn area, including the glass plant in Wisconsin, the Village Industry at Green Island, N.Y., the wheel plant at Hamilton, Ohio, the Iron Mountain Plant in Michigan, the Phoenix, Ariz., test track, coal and iron mines, and the rubber plantation in Brazil.

Ford employees and families working in gardens.

#### **TESTING**

276 ft., ed., 35 mm., si., b&w. (1925, 1936); 1,178 ft., ed., 35 mm., comp., b&w. (1948, 1950); 2,379 ft., uned., 35 mm., si., b&w. (1925-27, 1929, 1931, 1932, 1936, 1937, 1948); 97 ft., uned., 16 mm., si., k. (1946)

Testing and measuring in laboratories and/or at the production site:

Glass: worker taking sample from furnace and blowing a bulb.

Rubber: samples from several stages in the refining process being tested chemically and physically by stretching, and tires bouncing off a metal cleat and on the floor.

Upholstery fabric: quantitative analysis, tests for tensile strength and for color fastness, and seat cushions being rubbed together and undergoing heavy pounding by machines.

Metal: spectrographic and chemical analysis, profilograph tests for smoothness, X-ray for fracture and structure, electric furnace for heat tests, machine for testing strength, and salt bath for rust resistance.

Parts: measuring pistons and camshafts; wear-testing springs in machine; twist-testing axles in machine; determining hardness of crankshafts; placing tractor cylinders and heads under 40 pounds of water pressure; and history of the development and uses of Johansson gages, combination gage blocks, tolerance plug gages, and adjustable limit snap gages.

Cars: finished cars in weather tunnel being tested at 20° below zero and for performance and noise level; test-driving cars over ties of railroad tracks, on cobblestones, over rough terrain and torture track, through sand and mud and water, and at high

Plants 91

speed over smooth tracks; blowout tests; one car turning over during test drive; and a failure in attempting to drive a V-8 from a stop directly up a steep ramp.

#### TRAINING DEPARTMENT

710 ft., ed., 35 mm., si., b&w. (1946); 1,594 ft., ed., 35 mm., comp., b&w. (1945); 710 ft., uned., 35 mm., si., b&w. (1941, 1950)

Blind man, with seeing eye dog, being processed for employment at River Rouge Plant: receiving badge, signing in at cashier's cage, and being examined by doctor; man being photographed and fingerprinted; and dog being photographed and pawprinted.

Two training films for foremen: the first stressing the foreman's role as part of management, and the other teaching techniques for improving accuracy and consistency in rating the performance of workers.

Workers at machines, workers placing suggestions in box, and one worker receiving an award.

#### VISITORS TO THE ROUGE

4,652 ft., uned., 35 mm., si., b&w. (1925-27, 1930, 1931, 1938, 1939, 1942)

Prominent persons, frequently accompanied by Henry Ford, Mrs. Ford, Edsel Ford, and/or Charles Sorensen touring River Rouge Plant, Greenfield Village, and/or Ford Airport: Wallace Beery and Raymond Hatton; Crown Prince Adolph Gustav VI and Princess Louise of Sweden; Prince Bertil of Sweden; Mr. Citroen; Douglas (Wrongway) Corrigan; Prince Cyril of Bulgaria; Lily Damita; Crown Prince Frederic and Princess Ingrid of Denmark; Dorothy Gish; a

Japanese princess; Crown Prince Olaf and Princess Martha of Norway; the Our Gang Kids; Pascual Ortiz Rubio, then President-elect of Mexico; and King Peter of Yugoslavia.

#### **SUPPLIERS**

#### **GOODYEAR TIRES**

973 ft., ed., 35 mm., si., b&w. (1933)

Driving demonstrations of cars with poorly balanced and correctly balanced tires, and demonstration of Weaver wheel balancing stand.

#### HOLLEY CARBURETOR CO.

229 ft., ed., 35 mm., si., b&w. (1922)

Foundry with demonstrations of casting in long-life molds.

### UNIDENTIFIED UPHOLSTERY PLANT

2,631 ft., ed., 35 mm., si., b&w. (1927); 9,321 ft., uned., 35 mm., si., b&w. (1926, 1927)

Flocks of sheep before and after shearing, shearing with hand clippers and with electric clippers, buyer selecting wool, packing and tying fleeces, and shipping by truck and by railroad.

Upholstery manufacturing processes: weighing and sorting fleeces at plant; woolen refining processes including dusting, washing, drying, picking burrs, dyeing, blending and oiling, carding, roving, and spinning; winding yarn onto jack spools and then to section beams; hand-threading harness and placing it in loom; shuttle; weaving; finished fabric put through burling shears and through fulling, washing, and drying machines; inspecting, shearing again,

brushing, sprinkling, pressing, measuring, weighing, and testing fabric; cutting many layers with electric knife; sewing and stuffing covers; padding springs; tacking final covering on; testing for durability; and installing seats and other upholstery in car.

Farm family with new Ford bought with money from sale of wool.

#### TRACTOR PLANT

#### FORDSON TRACTORS

247 ft., uned., 35 mm., si., b&w. (1917)
Tractor plant buildings and grounds, Henry Ford and others examining tractor and watching maneuverability demonstration, and workers posing in yard and going into building.

#### VILLAGE INDUSTRIES

#### SMALL PARTS PLANTS

954 ft., ed., 35 mm., si., b&w. (1931); 19,871 ft., uned., 35 mm., si., b&w. (1920, 1922, 1930, 1931, 1935-38, 1940, 1941)

Several Village Industries under construction and dams, spillways, powerhouses, and plant buildings; powerhouse interiors and generators; details of spillways and gates; aerial views of Village Industries, the surrounding countryside, farms, and towns; men and women workers in plants, eating on lawns, playing baseball, fishing, and working in fields and gardens; children playing, fishing, and swimming; and exterior and interior views of plants.

Plants and products: Northville, valves; Phoenix, cutouts and regulators; Nankin Mills, engraving and fine tools and dies; Plymouth, taps; Milford, carburetors; Hayden Mills, soybean cleaning and sacking; Flatrock, lamps; Milan, ignition coils and soybean oil and meal; Sharon Mills, lighters and stoplight switches; Dundee, welding points; Newburg, drills; Waterford, precision production gages; and Ypsilanti, generators and starters. Antique fire engine in a frame firehouse.



Experimental one-man tank, World War I, Dearborn, Mich., 1918, Reel No. 200FC-2570(c).



Submarine chaser (Eagle Boat) construction, River Rouge Plant, Dearborn, Mich., 1918, Reel No. 200FC-1761.



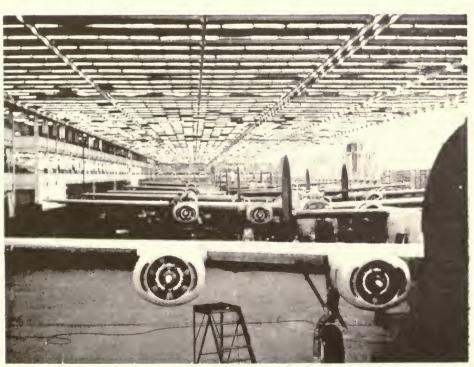
CG-4A glider, World War II, Iron Mountain, Mich., 1944. Reel No. 200FC-936.



Amphibious scout car demonstration, Dearborn, Mich., 1943. Reel No. 200FC-458.



B-24 Liberator bomber manufacturing, Willow Run Plant, Ypsilanti, Mich., 1943. Reel No. 200FC-3335.



B-24 Liberator bomber manufacturing, Willow Run Plant, Ypsilanti, Mich., 1943. Reel No. 200FC-3335.



# War-Related Manufacturing and Activities 1917–19, 1941–45, 1953

This group of film illustrates the war-related activities of the Ford Motor Company. During the first World War (1917-19), Ford made tractors for shipment to Great Britain, V-12 (Liberty) motors for airplanes. submarine chasers (Eagle Boats), helmets, and trucks; and experimented with small one-man tanks. During World War II (1941-45) Ford manufactured reconnaissance cars, armored personnel carriers, amphibious scout cars, trucks, M-8 armored cars, M-4 tanks, gliders, Pratt & Whitney airplane engines, B-24 Liberator bombers, M-7 antiaircraft gun directors, and hand grenades. In addition to these manufacturing activities, a Navy Service School and an Army Motor Transport School were established at the River Rouge Plant, and vans were donated by the company to the United Service Organization (USO). Ford made jet engines during the Korean Action (1953). The collection contains 5.480 feet of edited 35 mm., silent, black and white film; 11,658 feet of edited, 35 mm., composite, black and white film; 257 feet of edited, 16 mm.. silent, color film; 1,199 feet of edited, 16 mm., composite, black and white film; 32,705 feet of unedited, 35 mm., silent, black and white film; 755 feet of unedited, 16 mm., silent, black and white film; 531 feet of unedited, 16 mm., silent, color film; and 8.785 feet of 35 mm. and 3,493 feet of 16 mm., duplicate film.

#### WORLD WAR I

#### TRACTOR PLANT

598 ft., ed., 35 mm., si., b&w. (1917) Henry Ford and Lord Northcliffe

inspecting and driving Fordson tractors.

#### HIGHLAND PARK PLANT

1,715 ft., ed., 35 mm., si., b&w. (1918); 3,108 ft., uned., 35 mm., si., b&w. (1917, 1918)

#### Helmets

Helmetmaking processes: attaching chin straps, dip painting, applying sawdust, drying in baking oven, assembling headgear, inspecting, packing into wooden crates, and labeling crates.

#### **Liberty Motors**

Exterior and interior views of Highland Park Plant, Lincoln Plant, and Cadillac Plant.

Motor manufacturing: milling, operating lathes and presses, testing and measuring parts, assembling and testrunning motors, many women workers, and Government inspectors looking over work at all stages.

Airplane fuselage assembly.

Several completed planes, test flights, and a Liberty Caproni CA-5 taking off and in flight.

#### Tanks and Trucks

Fleet of trucks on road, one with sign "Packards for Pershing"; and armored trucks being driven from plant.

Test-driving small tanks over obstacle course including trenches, steep banks, mounds of loose earth, fenceposts, and railroad tracks; and several tanks getting stuck and one turning over.

#### RIVER ROUGE PLANT

2,325 ft., ed., 35 mm., si., b&w. (1918); 9,838 ft., uned., 35 mm., si., b&w. (1918, 1919)

#### Eagle Boats

Eagle Boat plant, transfer table, and lowering table, all under construction; Eagle Boats in all stages of construction from laying of keels to adding pilothouses after boats have been moved outside of plant on their construction flatcars; boats and flatcars being moved to lowering table on transfer table, lowering table sinking into water, boats floating free, tugs taking boats in tow, and lowering table rising; several Eagle Boats under way, one with party including Edsel and Mrs. Ford aboard; Henry Ford, sometimes accompanied by Naval Inspection Board, inspecting plant construction and site and boats at all stages of completion; and steam turbines for Eagle Boats under construction with detailed explanations of parts and their manufacture.

#### WORLD WAR II

#### **GENERAL**

2,937 ft., ed., 35 mm., comp., b&w. (1941, 1943, 1944); 3,552 ft., uned., 35 mm., si., b&w. (1941-44) History of the Ford Motor Company with emphasis on war activities: development of the automobile, in-

cluding bicycle wheels, open engines, covered engines, tops over cars, and windshields: World War I activities including Liberty bond promotion and other activities which have been described in detail under appropriate categories in the preceding section; Ford activities between the wars; World War II activities including manufacturing of trucks and superchargers for airplane motors; a worker giving blood and being congratulated by several people; Mr. and Mrs. Henry Ford and Edsel Ford with USO Mobile Service Club vans, donated by the Ford Motor Company, parked in front of the Rotunda; and other activities described in detail under appropriate categories in this section.

Assembly lines at Vultee Airplane Plant, Downey, Calif., and Lockheed Aircraft Corporation, Burbank, Calif., and a Lightning bomber taking off and in flight; and Flying Fortresses (Boeing B-17B's) at Hickam Field, Hawaii.

Ships engaged in battle; battleship and several smaller ships at anchor in a row; a submarine underway, submerging, and surfacing; and mosquito boats maneuvering off the coast of Florida.

#### HIGHLAND PARK PLANT 202 ft., uned., 35 mm., si., b&w. (1942)

M-7 Antiaircraft Gun Directors
Test-firing the gun.

#### HIGHLAND PARK AND RIVER ROUGE PLANTS COMBINED ACTIVITIES

1,529 ft., uned., 35 mm., si., b&w. (1942-44)

#### M-8 Armored Cars

Fleets of armored cars being test-

driven over rough field, moving over logs and other obstacles, and knocking down trees; and Henry Ford and Henry Ford II watching.

#### M-4 Tanks

Henry Ford, Charles A. Lindbergh, American officers including Gen. Henry H. Arnold, English and Russian officers, and civilians inspecting vehicles and watching driving demonstrations of armored cars and M-4 tanks; 25,000th tank engine on display; and Henry Ford II with last M-4 tank off assembly line.

#### IRON MOUNTAIN PLANT

2,018 ft., ed., 35 mm., comp., b&w. (1943, 1944); 1,622 ft., uned., 35 mm., si., b&w. (1943, 1944); 133 ft., uned., 16 mm., si., k. (1944)

#### **Gliders**

History of glider development: boys launching and trying to launch homemade gliders by towing them behind cars and boats, by jumping with them from shed roof, by racing downhill, by putting sail on glider and racing along beach, by attaching wings to bicycle and pedaling, and by lighting jet attached to bicycle; models of early gliders; early model airplane taking off; and several gliders taking off, being towed in air, in free flight, and landing.

Ground and aerial views of Iron Mountain Plant, lakes, forest, housing development, and farms.

Glider production: inspecting and testing materials; sawing, soaking, gluing, and shaping plywood parts in presses; mixing glue; drying glued parts with infrared light; sprayvarnishing; assembling floor, sanding, adding covering, and drying; applying plywood skin to nose frame and placing it into press; joining leading

and trailing wing frames, applying plywood skin, placing into press, and inspecting; applying airplane cloth skin to frame of trailing edge of wing and to plywood skin of leading edge; diagrams explaining, and final assembly to fuselage of skids, instrument panel, nose section, tail, wings, wingtips and struts, and controls; installing wiring; painting finished glider; and crating and shipping by railroad flatcars.

Military glider (CG-4A) demonstrations: jeeps, guns, and troops being loaded into gliders; low-flying planes snagging towlines stretched between two poles, lifting gliders into air, and dropping towlines; gliders in free flight and landing; troops leaving gliders and unloading jeeps and guns; and jeep towing glider on field.

Army-Navy E-Award ceremony: Army and Navy officers and Henry Ford II on speaker's platform; two American Legionnaires accepting E-Award flag for Iron Mountain workers; several individual awards; speeches; and large crowd, mostly workers.

#### RIVER ROUGE PLANT

4,636 ft., ed., 35 mm., comp., b&w. (1941, 1942, 1945); 4,295 ft., uned., 35 mm., si., b&w. (1941-43); 775 ft., uned., 16 mm., si., b&w. (1942)

#### **Amphibious Scout Cars**

Demonstrations: driving the cars on roads; in and out of icy river at 10, 15, 20, and 25 miles per hour; ice-breaking and maneuvering in water; climbing grades of 45 percent and 60 percent; driving over rough ground; jeep getting stuck and amphibious car winching it out; jeep and amphibious car traveling at 60 miles per hour;

and soldiers in full battle dress driving amphibious cars.

#### Motor Transport School

Soldiers on bus going to school; students in classroom with instructor lecturing and in garage examining exhibits of "U.S. Army Bomb Service Truck," "U.S. Army Reconnaissance Car," and "Engine Assemblies."

### Pratt & Whitney Airplane Engine Plant

Edsel Ford operating a steam shovel and turning a spadeful of dirt at ground breaking for the plant, a steam piledriver driving the first pile, and view of the completed building.

#### Reconnaissance Cars

Group of workers around the last car off the assembly line before war conversion, and with a reconnaissance car; Edsel Ford, Army officers, and civilians watching and participating in demonstrations of reconnaissance cars, including car jumping a ramp, backing up steep grades, going up and down hills through loose dirt, over rough terrain and large rocks, and through water; and explanations of features of the car.

#### U.S. Navy Service School

Dedication ceremonies on parade ground: sailors at attention; and Rear Adms. Chester W. Nimitz and John Downes, Comdrs. W. E. Miller and C. P. Cecil, and Henry and Edsel Ford participating.

Graduation exercise: 20,000th graduate being congratulated.

Decommissioning ceremonies: Henry Ford II receiving flag from Navy officer.

Ship maintenance training: students learning to operate lathes, micrometers, grooving machines, planes, drills, welding and hand-riveting equipment, and polishing machinery in the metal shops; woodworking shop; switchboard; students learning to repair electric motors in electrical shop; assembling and disassembling diesel and steam engines in engine shop; lecture and learning engine assembly in airplane engine plant; water system in model ship's hull, water testing, and pump operation; learning maintenance work on boats underway; mechanical drawing class; and library.

Military training: field exercises, water rescue drill, running an obstacle course, and standing review.

Recreational activities: tug-of-war, volleyball, boxing, ping-pong, push-ball, swimming, and band; and sailors with Waves at soda fountain.

Cafeteria and sleeping quarters with hammocks in barracks; and doctor examining sailor's eye, dentist working on patient, and hospital corpsman bandaging sailor's finger in infirmary.

Navy scenes: Waves working in office; fleet on maneuvers; interior of submarine and submarine submerging; aircraft carrier; and battleship of *Texas* class, sailors manning deck guns and antiaircraft battery, cooks in galley, sailors washing deck, and crew at muster.

# SOMERVILLE, MASS., PLANT 257 ft., ed., 16 mm., si., k. (1944)

#### **Armored Personnel Carriers**

New England Ford dealers visiting the Somerville Branch plant: armored personnel carrier assembly lines, and dealers riding in carrier on test track.

#### WILLOW RUN PLANT

2,067 ft., ed., 35 mm., comp., b&w. (1940-45); 1,199 ft., ed., 16 mm.,

comp., b&w. (1945); 9,401 ft., uned., 35 mm., si., b&w. (1940-45)

#### **B-24** Liberator Bombers

Edsel Ford at ground breaking ceremonies for the Willow Run Plant, building under construction, and a huge room with lines of planes in all stages of completion.

Bomber production: shaping metal plate in presses and attaching and riveting plate to fuselage; shaping plastic bubbles; assembling tail sections, engines, and hydraulic tubes; overhead cranes moving parts including fuselages; final assembly of tail and wing sections to fuselage, of engines to plane, of propellers to engines, of landing gear to plane, and of cockpit and canopy to plane; and installation of electrical system.

Tractors hauling B-24's out of plant; test flights; Henry Ford, Edsel Ford, and Henry Ford II with others, including Eddie Rickenbacker, touring plant; Henry Ford and Henry Ford II autographing the 5,000th Liberator bomber and with other officials inspecting it; 7,000th bomber; Henry Ford II driving hauling 8,000th plane out of plant, and workers and officials autographing it; Gen. Henry H. Arnold with Henry Ford inspecting plane; crew with Rangoon Rambler II; an experimental modification of B-24 taking off and in flight; Dearborn Ford dealers presenting Liberator bomber to officers; and bombers in formation flight.

Henry Ford, Henry Ford II, Under

Secretary of War Robert P. Patterson, UAW President Rolland J. Thomas, and crowd of workers at Willow Run Access Highway dedication ceremonies; children leaving bus, posing on porch of school, marching into building, and sitting in classroom at Willow Run School opening; and schoolhouse with flag flying from tower on roof.

An appeal for women workers in war industries: Wacs and Waves at work, U.S. Employment Service Office, training in riveting and engine shop work, and women at work at several jobs in the Willow Run Plant.

Minuteman awards: flags awarded to Ford Motor Company for 90-percent participation by employees in war bond purchase drive, and ceremonies at River Rouge and Willow Run Plants.

#### NEW ZEALAND PLANT 159 ft., ed., 35 mm., si., b&w. (1942)

#### Handgrenades

Minister of Munitions, the Hon. J. J. Sullivan, and a General Partridge touring plant; and grenade assembly, packing, and testing.

#### KOREAN ACTION

#### CHICAGO PLANT

398 ft., uned., 16 mm., si., k. (1953)

#### Jet Engines

Construction, assembly, and test-running of jet engines.



# Part IV FILM FROM OTHER SOURCES



Scene from a comedy produced by Thomas A. Edison, 1903. Reel No. 200FC-1571.



Another scene from the same comedy, 1903. Reel No. 200FC-1571.



Mexican refugees behind the U.S. lines, Mexican Border Punitive Expedition, 1916. From a Pathé newsreel. Reproduced by permission. Reel No. 200FC-1527(a).



Henry and Mrs. Ford with movie stars in Hollywood, ca. 1920. From a Universal newsreel. Reproduced by permission. Reel No. 200FC-2136.

# Non-Ford Productions: Assorted Subjects 1903–54

This category consists of film that was made by producers other than the Ford Motion Picture Laboratories and not produced for the Ford Motor Company. It contains advertisements; cartoons, comedies, and dramas: documentaries; news; personal films; propaganda; public service features: technical features; and travelogs. The collection contains 27.254 feet of edited, 35 mm., silent, black and white film: 13.919 feet of edited, 35 mm., composite, black and white film; 703 feet of edited, 16 mm., silent, black and white film: 3.470 feet of edited, 16 mm., composite, black and white film; 3,296 feet of unedited, 35 mm., silent, black and white film: 414 feet of unedited. 35 mm., silent, color film; 452 feet of unedited, 16 mm., silent, black and white film; and 4,326 feet of 35 mm. and 701 feet of 16 mm., duplicate film.

There are some restrictions on the use of the film. The user is responsible for ascertaining the copyright status of the film and for clearing the copyright with the holder before reproduction orders can be accepted.

## **ADVERTISEMENTS**

# AMERICAN FORK AND HOE COMPANY

13 ft., ed., 35 mm., si., b&w. (1936) Single frame advertising stills for True Temper farm and garden tools.

# CARNEGIE-ILLINOIS STEEL CORPORATION

"The 43—Continuous Hot Strip Mill of the Carnegie-Illinois Steel Corporation"

452 ft., uned., 16 mm., si., b&w. (1936)
Rolling mill, machinery, workers, and ingots.

# FORD MOTOR COMPANY, MINNEAPOLIS, MINN.

"Horseless Farming Shown Through Courtesy of Ford Motor Company"

897 ft., ed., 35 mm., si., b&w. (1917)
Drama advertising a tractor built by the Ford Motor Company of Minneapolis: boy leaving farm and going to work in a tractor factory; triwheeled tractor assembly lines; boy working as tractor salesman, marrying the farmer's daughter, and taking her and a new tractor home; and tractor in barnyard and fields.

#### ROBINSON MACHINE COMPANY

"Converting a Ford into a Truckford" 196 ft., ed., 35 mm., si., b&w. (1916)

Machine shop, workers removing body and rear wheels from Model-T Ford and adding truck body, and attaching chain drive to rear axle and truck wheels.

# CARTOONS, COMEDIES, AND DRAMAS

# BRAY PRODUCTIONS, INC.

"The Lunch Detective"

441 ft., ed., 35 mm., si., b&w. (1927) Animated comedy cartoon.

## THOMAS A. EDISON

"The Great Train Robbery"

710 ft., ed., 35 mm., si., b&w. (1903)

Melodrama about a train robbery and the capture of the outlaws.

"Down on the Farm"

427 ft., ed., 35 mm., si., b&w. (1905)

Slapstick comedy: men pursuing women through fields and to summer house over water, and women dumping man overboard and pelting him with apples.

# Slapstick Comedies

673 ft., uned., 35 mm., si., b&w. (1905)

Thief stealing pumpkins and chickens, being caught, tarred and feathered, and dumped into pond; man teasing woman milking cow and woman throwing milk on man; hayride; waiter dropping and breaking everything he brings to couple at table, and each scene run backward; woman bartender throwing two fighting men out; man in bed made up over bathtub, bed collapsing, and man repeatedly falling into water in tub and climbing out; policeman breaking up fight and placing fighters into horse-drawn paddy wagon; and Arabian-costumed dancer.

#### HAROLD LLOYD

#### Comedy

1,776 ft., ed., 35 mm., si., b&w. (1923)

Harold Lloyd comedy of adventures and misadventures with an automobile.

# TWENTIETH CENTURY-FOX FILM CORPORATION

#### **Movie Shots**

414 ft., uned., 35 mm., si., k. (1954)

Random shots from several movies including "Three Coins in a Fountain" and "Fabulous Las Vegas."

# UNIVERSAL FILM MANUFACTURING COMPANY, INC.

"Give Her Gas"

850 ft., ed., 35 mm., b&w. (1918)

Slapstick comedy about experiences of couple with new car.

## **DOCUMENTARIES**

# AMERICAN MUSEUM OF NAT-URAL HISTORY, NEW YORK CITY

"Indians of the Southwest"

400 ft., ed., 35 mm., si., b&w. (1941)
Pueblo Indians making adobe

bricks and building houses; making, painting, and firing pottery; grinding corn in metates; baking in outdoor beehive oven; carrying water; details of dress; Navajo shepherds with flock; and woman weaving blanket.

# ENCYCLOPAEDIA BRITANNICA FILMS, INC.

"Productivity, Key to Plenty"

744 ft., ed., 16 mm., comp., b&w. (1949)

Review of America's productivity, 1852-1950, illustrating rising productivity and improved standard of living.

#### GENERAL ELECTRIC COMPANY

"A Day with Thomas A. Edison"

4,591 ft., ed., 35 mm., si., b&w. (1922)

Drama depicting the life of Thomas A. Edison; and Edison visiting General Electric and visiting with General Electric scientists including Drs. W. R. Whitney, W. D. Coolidge, Irving Langmuir, and Charles Steinmetz.

## GERMAN SUBMARINE FILM

Log of U-35

1,046 ft., ed., 35 mm., si., b&w. (ed. 1919); 23 ft., uned., 35 mm., si., b&w. (1919)

Taken from the film log of the captured German submarine *U-35:* intercepting, boarding, and sinking the *Stromboli* (Italy), *India* (Greece), and *Corfu* and *Patagonia* (England); and permitting the *Asuarka* (Spain) to continue.

## LOEW'S, INC.

"Servant of Mankind"

788 ft., ed., 35 mm., si., b&w. (1938) Drama depicting Thomas A. Edison's contributions to society.

# MICHIGAN DEPARTMENT OF STATE

"Behind the Great Seal"

1,351 ft., ed., 35 mm., si., b&w. (1938)
Leon D. Case, Secretary of State, and Bernard J. Youngblood, Deputy Secretary of State, presenting and explaining functions of the Department; scenes in the Accounting Division, License Plate Registration Division, Operators and Chauffeurs License Division, and Main Branch Office, Detroit; State Prison of Southern Michigan and license plate manufacturing; and illustrations of safe and unsafe driving practices.

#### **NEWS**

#### ANDES FILM

Herbert Hoover in South America 441 ft., ed., 35 mm., si., b&w. (1928) President Herbert Hoover at railroad station at Caracoles, Chile; and a trip by car to the Christ of the Andes, with views including mountain scenery below and in a snowstorm, and Indians with mules.

#### **BOB BAILEY FILM**

"Ford V-8 Handicap"

243 ft., ed., 35 mm., comp., b&w. (1933)

1934 Ford cars on display at Epsom Downs racetrack; horserace; and the trophy presented to Howard Hughes, jockey of winner Command Man.

#### DETROIT NEWS

"Detroit News Pictorial" and "Detroit News Topics"

429 ft., ed., 35 mm., si., b&w. (1925); 196 ft., ed., 35 mm., comp., b&w. (1938)

Man driving and posing in a 1906 Ford; Henry and Edsel Ford with airplane at Ford Airport, and Model-T Fords being scrapped and placed into steel furnace at River Rouge Plant.

#### DETROIT TIMES

"Detroit Times Topics"

1,877 ft., ed., 35 mm., comp., b&w. (1930, 1931)

Zoo lions being fed; University of Michigan swimming team working out; Dr. Julius Klein, Assistant Secretary of Commerce, visiting Detroit; wrestling between world's champion Jim Londos and Renato Gardini of Italy; child entertainers on radio station WMBC; Battle Creek, Mich., 100th anniversary celebration parade; Ford Motor Company reopens; and Harmsworth Trophy race on Detroit River, Gar Wood winner, and Kaye Don in Miss England II capsizing.

#### **GAUMONT**

Kaye Don and Miss England III 107 ft., ed., 35 mm., comp., b&w. (1932)

Kaye Don in *Miss England III* breaking world speedboat record on Loch Lomond.

# HEARST METROTONE NEWS, INC.

"News of the Day"

122 ft., ed., 35 mm., comp., b&w. (1943); 435 ft., uned., 35 mm., si., b&w. (1942, 1944)

Workers assembling jet engines and casings for robot bombs, and welding and installing radiator assembly and cowling; military personnel and civilian inspectors in plant; and test-launching robot bomb, with booster cutting loose and hitting water.

#### KINOGRAM

"The Visual News of All the World" 869 ft., ed., 35 mm., comp., b&w. (1931)

Launching of dirigible Akron; razing German fortress of Hoher Kavalier, Kuestrin; liner Commonwealth at pier; models of Commonwealth and Bay State; Edgewater, N.J., Ford plant, assembly line; gold mining camp, sluice and panning, Spring Creek, S. Dak.; hurling match in the Bronx; "White Angel Jungle," San Francisco, and Mother Jordan giving food and clothing to men and boys; girls modeling old hats, Washington, D.C.; and canoe regatta on Isar Rapids between Toelz and Munich in Germany, with spectators and a band.

#### **METRO-GOLDWYN-MAYER**

#### "MGM News"

244 ft., ed., 35 mm., si., b&w. (1929); 847 ft., ed., 35 mm., comp., b&w. (1940) President Herbert Hoover on White House lawn with automobile magnates including Edsel Ford; and Mickey Rooney, Edison's widow (Mrs. Carolyn Hughes), and Father Edward J. Flanagan promoting motion picture "Young Tom Edison."

# MOVIETONEWS, INC.

"Fox Movietone News"

1,077 ft., ed., 35 mm., comp., b&w. (1934)

Highlights of 1934 World Series between the Detroit Tigers and the St. Louis Cardinals; players including Dizzy Dean, Paul Dean, Mickey Cockrane, Frankie Frisch, Pepper Martin, Schoolboy Rowe, and Jo Jo White; Baseball Commissioner Kenesaw Mountain Landis; and Will Rogers in grandstand.

## "Movietone News"

605 ft., ed., 35 mm., comp., b&w. (1939, 1942)

Ford exhibit hall, New York World's Fair; Gov. Alfred E. Smith, Mayor Fiorello La Guardia, and Grover A. Whalen welcoming Henry Ford, Edsel Ford, and Henry Ford II to fair; and troops boarding ship Edmund B. Alexander at Brooklyn.

# PARAMOUNT FAMOUS LASKY CORPORATION

"Paramount News" and "Paramount Sound News"

1,064 ft., ed., 35 mm., si., b&w. (1929, 1940); 1,201 ft., ed., 35 mm., comp., b&w. (1929, 1933, 1937, 1938, 1947)

Celebration of the 50th anniversary of the invention of the incandescent lamp at Dearborn, Mich.; people including Thomas A. Edison, President and Mrs. Herbert Hoover, and Henry and Mrs. Ford; and reenactment of

final experiment in Edison's laboratory at Greenfield Village.

Sir J. Thornycroft presenting speedboat *Miss England III* to Lord Wakefield and Kaye Don at Hampton, England.

Fiftieth wedding anniversary of Henry and Mrs. Ford, Henry and Edsel Ford entering White House for conference with President Franklin D. Roosevelt, wedding of Henry Ford II, and assembling and testing American robot bombs.

## PATHE EXCHANGE, INC.

"Pathé News" and "Pathé Sound News"

709 ft., ed., 35 mm., si., b&w. (1915, 1916, 1927); 93 ft., ed., 35 mm., comp., b&w. (1931)

Animated cartoon lampooning Henry Ford's "Jitney Submarine"; U.S. troops on the Mexican border, battle scenes, and Mexican refugees in U.S. trenches; Boston airport, with pilots and planes participating in the 1927 National Air Tour; and reopening of Ford plant at Dearborn.

#### "REO-GRAM"

Comdr. Richard E. Byrd and Plane 67 ft., ed., 35 mm., si., b&w. (1926)

Commander Byrd and Edsel Ford with plane Josephine Ford.

## RKO-PATHE, INC.

"RKO-Pathé News"

345 ft., ed., 35 mm., comp., b&w. (1937, 1942)

Henry Ford entering and leaving the White House.

Henry Ford presents school to U.S. Navy: sailors arriving at River Rouge Plant; Henry Ford, Comdr. C. P. Cecil of the Naval Training Service. and other officers at flag-raising ceremonies; several classrooms; and sailors at boxing match.

## "RICHARDS OAKLAND NEWS"

#### Detroit

315 ft., ed., 35 mm., si., b&w. (1931)
Detroit Art Museum; public library; Fisher Building; and aerial views of downtown Detroit, Hudson Motor Car Company, Henry Ford Hospital, and Packard Plant.

## TELENEWS, INC.

#### Willow Run

762 ft., ed., 35 mm., comp., b&w. (1942)

Willow Run Plant: workers; Liberator bomber assembly; cafeteria and kitchen; recreation center with scenes of ping-pong game, singing, dancing, sculpturing, sketching, and the theater building; and housing project, prefabricated house assembly, War Housing Center, churches, infirmary, and schools.

# UNIVERSAL PICTURES CORPORATION

"Universal Newsreel"

296 ft., ed., 35 mm., si., b&w. (1916, 1920); 46 ft., ed., 35 mm., comp., b&w. (1938)

Henry Ford with children at zoo and with family at home, Henry and Mrs. Ford visiting Hollywood, and 50th wedding anniversary celebration for Henry and Mrs. Ford.

# WARNER NEWS, INC.

"Warner Pathé News"

1,146 ft., ed., 35 mm., si., b&w. (1950); 244 ft., ed., 35 mm., comp., b&w. (1949)

Kickoff for Opportunity Bond Drive in Kansas City, Mo.: Alan Hale, Bruce Bennet, James Brown, and Wayne Morris selling bonds.

Ceremonies and celebrations for the premiere of the movie "Rocky Mountain" at Colorado Springs, Colo.: Virginia Mayo and Michael O'Shea participating.

#### UNIDENTIFIED SOURCE

643 ft., uned., 35 mm., si., b&w. (1940's and early 1950's)

Fragments of newsreel material: ticker tape parade for Gen. Douglas MacArthur; quonset huts for military housing; MacArthur returning to the Philippines, 1944; group including V. M. Molotov and Anna Pauker, and a closeup of Joseph Stalin; portraits of John L. Lewis, Walter Reuther, and George Meany; President Dwight D. Eisenhower and John Foster Dulles skeetshooting aboard a Navy vessel; President Harry S. Truman making a speech; President Franklin D. Roosevelt talking and laughing; African ceremonial dancing; depression scenes including men in soupline and sleeping on benches and in doorways, and shacks; and three comedy sequences, one of newlywed couple kissing, one of wild west style train robbery, and one of driving old cars on dirt road.

## PERSONAL FILMS

#### THOMAS A. EDISON

"John Burroughs at Riverby and Slabsides"

439 ft., ed., 35 mm., si., b&w. (1904) John Burroughs with family including his son and grandson.

## HARBEL CORPORATION

Ford Camping Trip 1,522 ft., uned., 35 mm., si., b&w. (1918)

Thomas A. Edison, Harvey Fire-

stone, Sr., Harvey Firestone, Jr., Henry Ford, and John Burroughs on camping trip; several campsites with tents and other equipment; and party eating, playing, walking in woods and beside a waterfall, and with an old steam engine on tracks in woods.

## **PROPAGANDA**

# REPUBLICAN NATIONAL COMMITTEE

"Spokesman of the Future"
865 ft., ed., 35 mm., comp., b&w.
(1944)

Reviewing the accomplishments of and campaigning for the election of Thomas E. Dewey to the Presidency of the United States.

# UNITED AUTOMOBILE WORKERS

"United Action Means Victory"
1,319 ft., ed., 16 mm., comp., b&w.
(1941)

The story of the 1939 strike against General Motors.

## PUBLIC SERVICE FEATURES

## BRAY PRODUCTIONS, INC.

"The Magic Chest"

124 ft., ed., 35 mm., si., b&w. (1931)

Thomas A. Edison making an appeal for funds for the Cleveland Community Fund.

#### HERB LAMB PRODUCTIONS

"Play Ball, Son"

1,551 ft., ed., 35 mm., comp., b&w. (1946)

Bert Dunne's 14-year-old ballplayers introduced by Joe Cronin, Manager, Boston Red Sox, illustrating fundamentals of baseball.

#### VERITY

"Piping Hot"

1,217 ft., ed., 35 mm., comp., b&w. (1944)

The story of the Ford Emergency Food Vans Program during and after bombing raids on England during World War II.

# TECHNICAL FEATURES

#### U.S. ARMY AIR FORCES

"New and Improved Manufacturing Processes—Forming"

1,407 ft., ed., 16 mm., comp., b&w. (1944)

Illustrating ease and economy of making parts by forming rather than by cutting.

# U.S. DEPARTMENT OF AGRICULTURE

"Factory Farmers"

887 ft., ed., 35 mm., comp., b&w. (1943)

Advantages of locating factories in rural or smalltown environments where workers can also be farmers.

# U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES, AND FORD MOTOR COMPANY

"Making a V-Type Engine"

2,101 ft., ed., 35 mm., si., b&w. (1936)

Iron ore unloaded from freighter at River Rouge Plant; ore storage bins; blast furnaces; open hearth furnaces, casting steel ingots; rolling mill; foundry; making sand cores for molds and assembling molds; casting, machining, boring, polishing, measuring, and inspecting cylinder blocks, crankshafts, camshafts, and the like; assembling, weighing, and inspecting pis-

tons; assembling parts to cylinder block; inspecting and test-running finished engines; and final automobile assembly line.

# "Safety Glass"

2,003 ft., ed., 35 mm., si., b&w. (1937)

Quarrying silica sand; crushing, washing, screening, and drying sand; weighing, mixing, and pressing glass ingredients into briquettes; charging the furnace; taking test sample and blowing bulb; rolling glass by machine; annealing glass in lehr; cutting by machinery; conveyors, elevators, and suction cranes moving glass; embedding glass in plaster of paris; grinding and polishing glass; washing, inspecting, cutting, and laminating safety glass; grinding, polishing, and sealing edges of laminated glass; and inspecting, testing, and installing windows in cars.

#### TRAVELOGS

# U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE

Bryce Canyon and Zion National Parks

2,635 ft., ed., 35 mm., si., b&w. (1930, 1937); 303 ft., ed., 16 mm., si., b&w. (1941)

Cedar Breaks National Monument; map indicating both parks.

Bryce Canyon National Park: lodge, rock formations, stream and waterfall, tourists on nature walk with park naturalist, horseback riders, and cabin and camping areas.

Zion National Park: canyons and plateaus; rock formations such as Great White Throne, Angel's Landing, Temple of Sinawava, and Great Arch of Zion; Observation Point; Lady Mountain, climbers using wooden ladders to climb cliff; Virgin River emerging from a cave, at low and flood stages; canyon floor, the Narrows; cliff dwellings; Zion-Mount Carmel Highway and tunnel with windows along the cliff face; Zion Museum with Mormon artifacts; and camping area, ranger station, and lodge and cabin area with swimming pool.

# "Waterton-Glacier International Peace Park"

1,961 ft., ed., 35 mm., si., b&w. (1936)
Map of park indicating tour route;
lodges; Trick, Twin, and St. Mary
Falls; Two Medicine, Swift Current,
Grinnell, Iceberg, Waterton, and
Upper St. Mary Lakes; Rockwell,
Wilbur, Grinnell, and Gould Mounts;
Grinnell and Sperry Glaciers; Ptarmigan Trail and Tunnel, Going-to-theSun Highway, and Logan Pass; bear

grass and mountain asters; ptarmigan, whistling marmot, beaver, ground squirrel, Rocky Mountain (bighorn) sheep, and Rocky Mountain goat; tourists fishing, hiking, and horseback riding; packhorse train; and Blackfoot Indians dancing and sitting in front of tepees.

# Yellowstone National Park

982 ft., ed., 35 mm., si., b&w. (1932)
Map of the park: entrance at Gar-

Map of the park; entrance at Gardiner, Mont.; Park Headquarters; Madison Junction Museum; Eagle Nest Rock; Liberty Cap; Obsidian Cliff; Hoodoo Mountains; Rustic, Gibbon, and Firehole Falls; Firehole Cascades; Apollinaris, Emerald, Bathtub, Beryl, Terrace, Tortoise Shell, and Silex Springs; Valentine, New, Little Castle, and White Dome Geysers; Fountain Paint Pot and Chocolate Pots; and deer, geese, bear, and wild flowers.

Accidents: investigation of, 39; research on, 80; on railroads, 6; in traffic, 11, 80 Adams, John, 30 Adelaide, Australia, 62 Adobe bricks, 21. Adolph Gustav VI, Crown Prince of Sweden, African dancing, 106 Agriculture, U.S. Department of, 37, 107 Airlines, 66 Airmail, 66 Airplane: history, 95; testing, 84 Airplane manufacture: Ford Tri-motor, 84; Liberty Motor, 93. See also World War I; World War II Airplane types: Alexander Eaglerock 6, 67; B-24, 97; Boeing B-17B, 94; Briggs Dart, 66; cargo, 58; Carrier Pigeon, 67; Curtiss F-Boat World War I trainer, 12; Curtiss Oreole, 67; Dayton-Wright Cruiser, 66; de Haviland, 53; Fairchild, 67; Fokker, 67; Ford Flivver, 58, 66; Ford Tri-motor, 61, 66, 67, 73, 74; Junker, 66-67; Liberty Caproni CA-5, 93; Lightning bomber, 94; Martin, 67; Martin bomber, 42; Mercury, 67; Pitcairn, 67; Ryan, 67; Stout, 66; Swallow, 66; Travel Air, 66; Waco, 67; Woodson 3A, 67 Airports: Boston, 105; Chicago, 66; Chile, 74; Cleveland, 66: Ford, 53, 66-67, 90, 91: Hickam Field, Hawaii, 94 Alabama, 8, 75 Alamo, the, Tex., 26, 76 Albion College, Mich., 34 Albuquerque, N. Mex., 74 Alexandria, Egypt, 62 Alexandria, Va., 27 Allen, Fred, 72 American Fork and Hoe Co., 101 American Legion, 35, 70 American Museum of Natural History, 102 American Red Cross, 10, 36, 37-38, 77 Amsterdam, Holland, 63 Amundsen, Roald, 75 Andes Mountains, 61, 79; of Chile, 74, 103; of Peru, 40 Animals: of Brazil, 68; domestic, 6, 8, 31, 36, 38; of the Rocky Mountains, 20, 23, 108; wild, 8, 31; zoo, 6, 68 Antiaircraft guns, 94 Antwerp, Belgium, 62 Apache Trail, Ariz., 20

Appliances, electric, 17 Archaeology, 40 Argentina, 61, 78-79 Arizona, 20-21, 29, 40, 74 Arkansas, 20, 21, 75 Arkansas River, Colo., 23, 75 Arlington National Cemetery, Va., 5, 6, 27 Armistice celebrations. See World War I Arms production. See names of individual weapons; World War I; World War II Army Air Forces, U.S., paratroop exercises, 66 Army, U.S., training, 6, 12, 96 Arnold, Henry H., 95, 97 Assembly lines, 58, 76, 104, 105; airplane, 12, 58, 84, 93, 94, 97, 105; automobile, 58, 62, 66, 86, 87, 97, 104, 107; glider, 95; Lincoln-Mercury, 78; tractor, 78, 84, 86, 87, 101; truck, 77 Atlanta, Ga., 23 Atlantic City, N.J., 24 Au Sable River, Mich., 32 Austin, Tex., 25, 76 Australia, 61-62 Autogiro. See Helicopter Automobile: design, 87; history, 58, 62, 69, 73, 77, 94; manufacture, 57-58, 61-64, 75, 76, 78, 84-87, 92, 107; scrapping, 89; shows, 72; small parts, 92; testing, 90. See also Ford Motor Co.; Lincoln Motor Co.; Trucks Automobiles, Ford models: Quadricycle, 1903-7, 74; Model-T, 1908-27, 75; Model-A, 1927-31, 75; V-8, 1932-54, 76

Bad Lands, S. Dak., 25, 76 Baettner, J. A., 67 Bahama Islands, 28; salt industry in, 15; sponge fishing in, 13 Bailey, Bob, 103 Baker, Newton D., 5, 75 Balloons, 66-67. See also Dirigibles Baltimore, Md., 24 Barcelona, Spain, 64, 74 Barkley, Alben W., 41 Baseball, 5, 32, 41, 71, 106; American Legion Jr., 70; 1934 World Series, 35, 104 Basketball, 35, 71, 81 Beard, Daniel, 52 Beatty, Clyde, 36 Beech, Walter, 66 Beery, Wallace, 91 Bees, 7-8 Belém, Brazil, 68

Belgium, 62 Canada, 6, 8, 42; Algonquin Park, 41; Cana-Bell, Joseph E., 5 dian Rockies, 28; Waterton-Glacier Inter-Bennett, Bruce, 106 national Peace Park, 39; wild bird sanctu-Bennett, Harry, 70 ary, 37; Windsor, Ontario, 62 Ben Nevis Mountain, Scotland, 62, 75 Cannon, Joseph G., 6 Benzol, 58 Carburetors, 33, 91 Berry, Martha M., 47 Carnegie-Illinois Steel Corp., 101 Berry School, Rome, Ga., 47, 75 Carson, Christopher ("Kit"), 37 Bertil, Prince of Sweden, 91 Cartoons, animated, 34, 102, 105 Bilbo, Theodore G., 76 Carver, George Washington, 51 Cascade Range, Wash., 26 Bimini Island, Bahamas, 28 Birds, 31; geese, 37; pheasants, 9 Case, Leon D., 103 Bird sanctuary, 37 Cattle ranches, 8, 37 Bismarck, N. Dak., 76 Cecil, C. P., 96, 105 Black Hills, S. Dak., 76 Cement, 58, 86 Blarney Castle, Ireland, 63 Ceylon, rubber plantation in, 19 Chamberland, Ted, 79 Bobsledding, 32 Chapman, Sam, 70 Bolivia, 78-79 Charities, 36, 37-38, 47-48, 106 Bombay, India, 63 Chesapeake Bay, 13, 23 Boone, Daniel, 37 Cheyenne, Wyo., 75 Bormann, Martin, 42 Boston, Mass., 5, 24, 30, 76 Chicago, Ill., 5, 8, 14, 20, 23, 75 Chicago World's Fair, 72-73 Bowman, "Chief," 66 Chile, 62, 74, 103 Boxing, 32, 35, 71 China, 62 Boyer, Robert, 87, 88 Christ of the Andes, 103 Boy Scouts: American, 10, 36, 41, 66; Cana-Christman, Paul, 81 Ciano, Count Galleazzo, 42 Bray Productions, Inc., 102, 106 Circuses, 32, 36, 75; Buffalo Bill, 6, 32 Brazil: Belém, 68; Pará River, 68; Rio de Cities: African, 62, 64; Asian, 58, 62-63; Aus-Janeiro, 40; rubber plantation, 58, 68, 90; tralian, 61-62; Central American, 28-29, 40; São Paulo, 62; Tapajos River, 68 European, 5, 57-58, 62-64; North American, Breadlines, 104, 106 5, 29-31, 57-58, 61-62; South American, 40, Bridges, 69 57, 61, 62, 78-79. See also names of indi-Brisbane, Australia, 62 vidual cities, States, and countries Brock, William S., 67 Citroen, André, 91 Brooks, Harry, 66, 67 Civil War: monuments and sites, 26, 30-31, Brown, James, 106 75, 76; veterans, 31 Bryan, Charles W., 76 Clay, Eleanor. See Ford, Mrs. Edsel Bryant, Clara. See Ford, Mrs. Henry Clemenceau, Georges, 27 Buchanan, James, 30 Cleveland Community Fund, 106 Buenos Aires, Argentina, 61, 78-79 Cleveland, Ohio, 25 Bugas, John S., 71 Cliff dwellings: in Arizona, 20, 40; in New Burbank, Luther, 31 Mexico, 24, 30 Burras, Clara, 46 Clocks, 16 Burroughs, John, 6, 45, 46, 50, 106 Coal mines, 14-15, 58, 65, 68, 90 Buses, Ford, 77 Coast Guard, U.S., training, 12 Byrd, Richard E., 67, 105 Cobb, Irvin S., 75 Cockrane, Mickey, 104 California, 21-22, 61, 74, 75, 76, 105; agricul-Codwell. Cv, 67 ture in, 9, 31 Cody, William F. ("Buffalo Bill"), 32, 37 California Pacific International Exposition, Coeur d'Alene, Lake, Idaho, 26 San Diego, 72, 76 Coke ovens, 58, 68, 86 Cambridge, Mass., 24, 30 Cologne, Germany, 63 Campaign, presidential, 1944, 106 Colorado, 5, 20, 23, 75; Colorado Springs, 106; Campbell, E. K., 66 Pikes Peak, 80. See also Rocky Mountains Camping, 42, 45-46, 106 Colorado River, 20, 21, 40, 74 Camps: Boy Scouts of America, 10, 41; Ca-Columbia River, 76 nadian, 41; day, 37, 71; Detroit Recreation. Columbus, Ga., 75 32; Legion, 47-48; religious, 11; VFW Buddy Columbus, Ohio. 74, 76 Poppy, 41; Willow Run, 47-48 Comedies, 102, 106

Commercial Airplane Reliability Tour for the Edsel B. Ford Trophy, 66-67 Communications systems, history of, 33 Concord, Mass., 5, 30 Concord, N.H., 76 Coney Island, 25 Coolidge, Calvin, 40 Coolidge, W. D., 103 Copenhagen, Denmark, 62, 79 Copper mine, 20 Cork, Ireland, 63 Cornell University, 8; accident research, 80 Corrigan, Douglas ("Wrongway"), 91 Costumes, 19th-century, 49-50 Couzens, Frank, 35 Couzens, James, 66, 75 Crater Lake, Oreg., 76 Crockett, David, 37 Cronin, Joe, 106 Crops, 6-10, 31, 50, 71 Crusade for Freedom, 40 Cuba, 28, 40 Cuernavaca, Mexico, 29 Cullenbine, Roy, 70 Cummings, Bill, 79 Custer, Gen. George A., 37 Cyril, Prince of Bulgaria, 91

Dagenham, England, 62 Dahlgren, Babe, 80 Dahlinger, John, 70-71 Dahlinger, Mrs. Ray, 70 Dairies, 8 Dallas, Tex., 25-26 Damita, Lily, 91 Dams: Boulder, 76; Elephant Butte, 20; Fort Peck, 77; Roosevelt, 9, 20; Wilson, 75 Dancing, 36, 49, 53, 54; African, 106; for Ford employees, 71 Daniels, Bebe, 35 Daniels, Josephus, 6 Daughters of the American Revolution, 5, Dean, Dizzy, 104 Dean, Jenny, 62 Dean, Paul, 104 Dearborn Independent, 49 Dearborn, Mich., 40, 57, 76, 87 Death Valley, Calif., 76 De Forrest, Lee, 52 Delaware River, Pa., 33 Del Rio, Dolores, 75 Denmark, 62, 79 Denver, Colo., 5, 23, 75 Depression, 106 Deserts, 39, 74, 76 Des Moines, Iowa, 75 Detroit, Mich., 5, 6, 10, 20, 24, 37, 39, 57, 87-88, 105; Belle Isle, 6, 39; Cross Country Riding Club, 6; Institute of Arts, 47; police, 38-39

Detroit River, 20, 32 Detroit, Toledo, and Ironton Railroad, 58. 65, 68-69 Dewey, George, 6 Dewey, Thomas E., 106 Dirigibles, 12, 67, 77, 84, 104 Dishwashing machine, 11 District of Columbia National Guard, 5 Doerr, Bobby, 70 Don, Kaye, 103, 104, 105 Downes, John, 96 "Down on the Farm," 102 Drahos, Nick, 81 Drama, 19, 38, 53, 54, 71; commercial, 102; history of Ford Motor Co., 58; of transportation, 72 Dublin, Ireland, 5 Dulles, John Foster, 106 Duncan's Bay, Mich., 42 Dunne, Bert, 106

Eagle Boat manufacturing, 58, 94 Earhart, Amelia, 74, 79 Eaton, Charles A., 52 Edison Institute of Technology, Greenfield Village, 51 Edison, Thomas A., 6, 45, 46, 51-52, 75, 103, 104, 106; and buildings at Greenfield Village, 52; films by, 102, 106; inventions and modifications of, 52 Edison, Mrs. Thomas A. (Carolyn H.), 45, 46. See also Hughes, Carolyn H. Edison Education: at Berry School, 47, 75; of the deaf, 11-12; at Greenfield Village schools, 53-54; in English school, 70; nursery, 38; police, 38-39; rural, 11; safety, 11, 15, 38, 39, 80-81; urban, 11; vocational, 12, 58, 84, 87: voter, 39 Edward, Prince of Wales, 62 Egypt, 62 Eisenhower, Dwight D., 106 Electric appliances, 17 Electricity: generators of, 63, 88; history of,

Electricity: generators of, 63, 88; history of, 10; in incandescent lamp, 52, 104-105; in rural areas, 8
Elizabeth Lake, Mich., 32
El Paso, Tex., 29
Encyclopaedia Britannica Films, Inc., 102
England, 62-63, 105; in World War II, 107
Engraving and Printing, Bureau of, 12, 27
Erie, Lake, 20
Estes Park, Colo., 23
Evans, Dave, 79
Evashevski, Forrest, 81
Everglades, Fla., 23
Explosives, handling of, 81
Exposition of Progress, New York, 73

Factories in rural areas, 107 "Factory Farmers," 107 Fair Lane, 45

Fairbanks, Douglas, 75 Gajecki, Leon, 81 Fairs: for Ford employees, 71; at Lake Shore Galt, Edith Bolling. See Wilson, Mrs. Wood-County, Mich., 40-41; at Michigan State, row 73-74; at San Diego, 72, 76. See also World's Games: bridge, 71; checkers, 32; chess, 71; dice, 32 Gardini, Renato, 103 Farming machinery and methods, 7-10, 50, 77-78 Gardner, Chet, 79 Fashion shows, 36, 104 Gaumont, 104 Feller, Bob, 70 General Electric Co., 102-103 Ferris, Woodbridge N., 5 Generators, 63, 88 Fertilizer, 58, 86 Geography, 33 Finland, 63 Georgia, 15, 23, 75 Firefighting, 11, 38, 77 Germany, 63, 103, 104 Firestone, Harvey, Jr., 46, 106 Gestring, Marge, 81 Firestone, Mrs. Harvey, Jr., 46 Gettysburg, Pa., 75 Firestone, Harvey, Sr., 46, 106 Gibbons, Floyd, 45 Firestone, Mrs. Harvey, Sr., 46 Gibson, Charles Dana, 52 Firestone, Russell and Mrs., 46 Gish, Dorothy, 75, 91 "Give Her Gas," 102 Fishing: commercial, 13; sports, 27, 31, 32, 71 Fitzmaurice, James E., 39, 67 Glass, 17, 58, 86-87, 90, 107 Flags, U.S., history of, 30 Gliders, 95 Flanagan, Father Edward J., 53, 104 Goering, Hermann, 42 Goff, E. A., 67 Fleming, Art, 80 Florida, 8, 23, 29-30 Gold: mining, 104; panning, 21, 23, 104 Flour mill, 10 Golf, 32, 35, 41-42, 71 Flower show, 36 Gomez, Lefty, 80 Football, 6, 32, 41, 75, 76, 81 Goodwill Industries, 36 Ford, Benson, 45, 46, 66, 72 Gordon, Al, 80 Ford, Mrs. Benson (Edith McNaughton), 46 Grand Canyon, 21 Ford, Edsel, 39, 45-47, 50-54, 58, 62, 66-67, 69, Grant, Heber J., 76 72, 74, 80, 84-85, 88, 91, 94, 96-97, 103-105 Great Britain. See England; Scotland Ford, Mrs. Edsel (Eleanor Clay), 45-46, 50, Great Lakes, 20 54, 85 Great Salt Lake, 76 Ford farm, 49-50 "Great Train Robbery, The," 102 Ford Foundation, 48 Greenberg, Hank, 41 Ford, Henry, 5-6, 39-40, 45-47, 49-54, 58, 66-Greenfield Village, Mich., 46, 50-54, 69, 91 67, 69, 71-72, 74, 84-85, 87-88, 91-97, 103-Griffith, Paul H., 70 Grofe, Ferde, 74 106; biography of, 58 Ford, Mrs. Henry (Clara Bryant), 40, 45-47 Guadalajara, Mexico, 29 49-51, 53-54, 58, 66-67, 85, 88, 91, 94, 104 Guadalupe, Mexico, 29 Guarda, Lake, Italy, 42 Ford, Henry II, 40, 45-46, 48, 59, 66-67, 72, Gulf of Mexico, 13 74, 79-80, 95-97, 104-105 Ford, Mrs. Henry II (Anne McDonnell), 46, Hagen, Walter, 32 105 Hale, Alan, 105 Ford, Josephine, 45 Hale, Frederick, 75 Hamilton, Richard G., 67 Ford Motor Co., 8, 57-59, 61-64, 66-81, 83-97; annual reports, 59; history of, 58, 94; sales, Hammon, Buss, 80 Handgrenades, use of in World War II, 97 69-70; service, 70 Ford Motor Co. of Minneapolis, Minn., 101 Handicraft exhibits, 36 "Ford V-8 Handicap," 103 Hanna, Mark, 36 Ford, William Clay, 45 Harding, Chester, 28 Harding, Warren G., 12, 27, 46 Foster, Stephen, memorial at Greenfield Vil-Harmon, Tom, 81 lage, 53 Hartley, Roland, 76 Frame, Fred, 79, 80 France, 63, 74 Hatton, Raymond, 91 Frank, Bruno, 42 Hauge, Oscar, 61 Havana, Cuba, 28, 40 Frederic, Crown Prince of Denmark, 91 Hawaii, 15, 27; Hickam Field, 94 Frisch, Frankie, 104 Hawks, Frank M., 67 Gaither, H. R., 48 Hearst Metrotone News, Inc., 104

Indianapolis Speedway, 75, 79

Helicopters, 67, 84 Helmets, in World War I, 93 Helsinki, Finland, 63 Henry Ford Hospital, 48 Henry Ford Museum, 50-54, 69 Henry Ford Trade School, 58, 84, 87 Henry, Lou. See Hoover, Mrs. Herbert Herb Lamb Productions, 106 Hess, Rudolph, 42 Hill, E. J., 67 Himmler, Heinrich, 42 Hirohito, Emperor of Japan, 42 Historic monuments: Arlington Memorial Amphitheater, 5; Civil War, 26, 30-31; foreign, 62-64; Revolutionary War, 5, 24, 26, 30. See also Historic sites Historic sites: the Alamo, 26, 76; of the Civil War, 26, 30-31, 75-76; of the colonial period, 29-30; in foreign countries, 62-64; Herbert Hoover's birthplace, 75; Mount Vernon, 27, 30; Ponce de Leon landing site, 29; of the Revolutionary War, 5, 24, 26, 30; Thomas Lincoln cabin, 111., 75; of the War of 1812, 76. See also individual cities and countries; Missions, Spanish; Historic monuments; Ruins Hitler, Adolph, 42 Hobbies, 71 Holland, 63 Hollywood, Calif., 105 Honolulu, Hawaii, 27 Hood Canal, Wash., 26 Hood, Mount, Oreg., 25 Hoover, Herbert C., 51, 103, 104; birthplace Hoover, Mrs. Herbert (Lou Henry), 51, 104 Hopkins, Nancy, 67 Horton, Henry H., 76 Hospitals: Children's, 33; Henry Ford, 48; Hotel Dieu, Windsor, Ont., 38 Hotel Statler, 13 Huber, Henry A., 76 Huenefeld, Baron von, 39, 67 Huerta, Adolfo de la, 29 Huffman, W. E., 67 Hughes, Carolyn H. Edison, 53, 104. See also Edison, Mrs. Thomas A. Hughes, Charles Evans, 27 Hughes, Howard, 103 Hunt, Harry, 79 Hurling, 104 Huron, Lake, 20 Hutchinson, Buddy, 70

Iceboating, 32, 35
Ice-cream-making machine, 11
Ice: harvesting, 13-14, 31; making, 6
Illinois, 5, 8, 14, 23, 75
Implements, farm, 7, 8, 9, 10, 50, 77-78
India, 63
Indianapolis, Ind., 5, 6, 74, 75

Indians: Central American, 29, 40; North American, 11, 20, 21, 23, 24, 25, 30, 36, 39, 40, 41, 76, 102, 108; South American, 40, 78, 79, 103 Industrial revolution, 102 Industry: history of, 102; minimum wage in, 36; safety devices in, 11, 81; types of products in, 13-20; unions in, 71-72, 106; working conditions in, 11. See also names of specific industries Ingrid, Princess of Denmark, 91 Instruments of measure, history of, 62-63 Interior, Department of the, 107 International Association of Chiefs of Police, 76 Iowa, 8, 75 Ireland, 5, 63 Iron mines, 14, 58, 90 Irrigation, 9, 20

Jackson, Miss., 76
Jacksonville, Fla., 23
Jamaica, 8-9, 28
James, Ollie, 5
Japan, 29, 63; agriculture, 9
Jefferson, Thomas, 30
Jehl, Francis, 52
Jersey City, N.J., 75
Jessel, George, 38
Johnson, Bill, 81
Johnson, Jim, 81
Jones, Casey, 67
Josephine Ford (airplane), 105
Juárez, Mexico, 29
Junkers, Herta and Mrs., 67

Kaminski, A. J., 61
Kansas, 8; Wichita, 74
Kansas City, Mo., 74, 105
Keller, Helen, 6
Kentucky, 68; Fort Harrod, 76
Kesselwood, Jim, 81
Kilauea Crater, Hawaii, 27
Kingston, Jamaica, 28
Kinogram, 104
Klamath Lake, Oreg., 76
Klein, Julius, 103
Knud, Prince of Denmark, 79
Koehl, Hermann, 39, 67
Kruesi, Paul, 52
Kurowski, Whitey, 70

Labor: minimum wage, 36; parade, 76; strikes, 71; working conditions, 11
La Guardia, Fiorello, 104
La Huerta, Adolfo de, 29
Lake, Eddie, 70
Lake Shore County Fair, Mich., 40-41
Landis, Kenesaw Mountain, 104

Langmuir, Irving, 103 Lansing, Mich., 42 La Paz, Bolivia, 78-79 Laramie, Wyo., 75 Las Vegas, Nev., 76 Leather, 13, 17-18 Leavenworth Prison, 11 Le Gallee, George M., 67 Leland, Henry M., 58, 85 Leland, Wilfred and Mrs., 58, 85 Leslie, Harry G., 75 Mays, Rex, 80 Lewis, H. M., 79 Lewis, John L., 106 Lexington, Mass., 5, 30 Liberty Loans, 6, 12 Lima, Ohio, 68-69 Lima, Peru, 78 Lincoln, Abraham, 30 Lincoln Motor Co., 85, 90, 93; Lincoln-Mercury, 1924-49, 78-79 Lincoln, Nebr., 76 Lincoln, Thomas, Illinois log cabin of, 75 Lindbergh, Charles A., 67, 74, 84, 95 Lindbergh, Evangeline L., 67 Lisbon, Portugal, 64 Little, Gordon, 62 Bay Lloyd, Harold, 58, 102 Loch Lomond, Scotland, 104 Locomotive Works of Lima, Ohio, 68-69 Loew's Inc., 103 London, England, 62 Londos, Jim, 103 Long Beach, Calif., 61, 75 Lookout Mountain, Colo., 5 Los Angeles, Calif., 21, 22, 74 Lott, E. P., 67 Louise, Lake, Canada, 28 Louise, Princess of Sweden, 91 Louis Ferdinand, Prince, 39 Louisiana, 7, 20, 23, 76 Lowe, Mount, Calif., 21 Lumbering, 14, 16, 45, 58, 67-68, 78; salvage operations, 89 Lyon, Ben, 35 McAdams, Dean, 81 MacArthur, Douglas, 106 McCosky, Barney, 41, 70 McDonnell, Anne. See Ford, Mrs. Henry II Mack, Ray, 70 McNaughton, Edith. See Ford, Mrs. Benson Madison Square Garden, 72

Miller, Logan, 71 Miller, W. E., 96 Milwaukee, Wis., 76 Miner, Jack, 37 Minnesota, 24, 61, 76 Mississippi, 30-31, 76 Mississippi River, 75 Missouri, 24, 74, 76, 105 Mitchell, S. A., 67 Moab Desert, Utah, 76 Moffett, William A., 67 Madison, Wis., 76 Molotov, V. M., 106 Magician, 36 Monroe, Mich., 39-40 Maitland, Lester, 75 Montana, 20, 24, 108 Manufacturing. See Airplane manufacture; Montgomery, Ala., 75 Automobile; Industry Montpelier, Vt., 76 Marefos, Andy, 81 Markham, Edwin, 22 tional monuments

Marshall, George C., Jr., 75 Martha, Princess of Norway, 91 Martin, Pepper, 104 "Mary Had a Little Lamb," 38 Maryland, 23-24 Massachusetts, 5, 24, 30, 76 Maxson, H. W., 67 May Day festivals, 6, 53-54 Mayer, Louis B. and Mrs., 52-53 Mayo, Virginia, 106 Meany, George, 106 Melchior, Fred, 66 Memphis, Tenn., 25 Menlo Park. See Greenfield Village Merrill-Palmer School, Detroit, 38 Meteorite craters, 39 Metro-Goldwyn-Mayer, 104 Mexican Border Punitive Expedition, 6, 105 Mexico, 29, 40, 64 Mexico City, Mexico, 29, 64 Meyer, Louis, 80 Michigan, 34, 39, 42, 76-77, 103. See also Dearborn; Detroit; Greenfield Village; Lake Shore County; Lansing; Monroe; Thunder Michigan Humane Society, 38 Michigan, Lake, 20 Michigan Pikers' Association, 42 Michigan State College, 37 Michigan State Department, 103 Michigan State Fairs, 46, 73-74 Michigan State Police, 38-39 Military training, 12, 96, 105 Military vehicles: of World War I, 6, 12, 93-94; of World War II, 94-96 Mines, 11, 81; coal, 14-15, 58, 65, 68, 90; copper, 20; gold, 21, 104; granite, 15; iron, 58, 90; phosphate, 65, 68; salt, 15; zinc, 35 Minneapolis, Minn., 24, 61, 101 Missions, Spanish, 21, 26, 29, 75 Mojave Desert, Calif., 74, 76 Montevideo, Uruguay, 64 Monuments. See Historic monuments; Na-

Monument Valley, Ariz., 40
Moore, Lou, 79
Morris, Wayne, 106
Mortan, W. H., 67
Mountain climbing, 21, 28
Mount Vernon, Va., 27, 30
Mount Wilson Observatory, Calif., 74
Moyer, Max, 67
Mucha, Rudy, 81
Murray, "Alfalfa Bill," 76
Murtaugh, Danny, 70
Muscle Shoals, Ala., 75
Music, 71
Mussolini, Benito, 42

Nashville, Tenn., 76 National Farm Youth Foundation, 40 National Good Drivers League, 80-81 National Guard, 5 National monuments: Cedar Breaks, Utah, 107; Monument Valley, Ariz., 40; Rainbow Bridge, Utah, 40 National parks: Bryce Canyon, Utah, 39, 107; Glacier, Mont. (Waterton-Glacier International Peace Park, Mont. and Canada), 24, 39, 108; Sequoia, Calif., 31; Yellowstone, Wyo., 26-27, 40, 108; Yosemite, Calif., 22; Zion, Utah, 39, 76, 107-108 Naval Inspection Board, World War I, 94 Navy, U.S., training, 12, 96, 105 Naylor, W. C., 67 Nebraska, 8, 75; Lincoln, 76 Negroes, 10, 21 Nelson, Bob, 81 Netherlands, The, 63 Nevada, 76 Newberry, Phelps, 52 New Hampshire, 76 New Jersey, 5, 24, 75 New Mexico, 20, 24, 30, 74 New Orleans, La., 7, 23, 76 Newport, R.I., 29, 30 New Providence Island, Bahamas, 28 Newspaper publishing, 15, 49 Newsreels, 103-106 New York, N.Y., 8, 24-25, 76, 77 New York (State), 8, 20, 24-25, 76-77 New York World's Fair, 74, 104 New Zealand, 64 Niagara Falls, N.Y., 20, 25, 76 Nimitz, Chester W., 96 Norfolk, Va., 26

Oakland, Calif., 75 O'Boyle, Tom, 81 Obregón, Alvaro, 29 Observatory, Mount Wilson, Calif., 74 Occupational therapy, 10, 12-13 Ochs, Adolph, 52

Northcliffe, Lord Alfred, 93

North Dakota, 76

Ohio, 25, 68-69, 74-75, 76
Oil, 33, 76
Oklahoma, 74, 76
Oklahoma City, Okla., 76
Olaf, Crown Prince of Norway, 91
Oldfield, Barney, 79
Olympia, Wash., 26, 76
O'Neill, Steve, 41
Opportunity Bond Drive, 105-106
Oregon, 25, 75, 76
O'Shea, Michael, 106
Our Gang Kids, 75, 91
Ozark Mountains, 21

Pageants, 27, 36, 47, 75-76 Palmer, Sam, 79 Panama, 28-29 Panama Canal, 28, 40 Panama City, Panama, 28-29 Paolo, Peter de, 79 Paper, 18, 58, 87 Parades, 5, 6, 11, 24, 25, 27, 32, 34, 40-42, 74, 76, 77, 79, 80 Paramount Famous Lasky Corp., 104 Pará River, Brazil, 68 Paratroops, 66 Paris, France, 63 Partridge, General, 97 Patterson, Robert P., 97 Pauker, Anna, 106 Pearson, Drew, 40 Pennsylvania, 25, 30, 33, 75 Pens. 18 Perkins, Frances, 35 Perry, Lord Percival, 62 Pershing, John J., 27 Peru, 40, 78-79 Pest control, 37 Peter, King of Yugoslavia, 91 Petrified forests, Ariz., 20 Petroleum, 33 Pet shows, 36 Petticord, Jack, 79 Pheasants, 9 Philadelphia, Pa., 25, 30, 75 Philippine Islands, 106 Phoenix, Ariz., 20 Phosphate mines, 68 Physical therapy, 12-13 Pickford, Mary, 35, 75 Picnicking, 32, 71 Pikes Peak, 23, 76, 80 Pittsburgh, Pa., 25, 30, 75 Plastics, 58, 88 Pole, Sir Felix, 52 Police, 41; in Detroit, 36, 39, 76; at Michigan State, 38-39 Ponce de Leon landing site, 29 Port Elizabeth, South Africa, 64 Portland, Oreg., 25, 75 Portugal, 64

Post Office Department, 12
Potomac River, 27
Poultry, 9
Precision machinery, history of, 62-63
Presidents, U.S., George Washington to
Warren G. Harding, 12
Providence, R.I., 76
Puget Sound, Wash., 26
Pyramid of Cheops, 62

#### Quintanilla, Carlos, 79

Races: airplane, 66-67; automobile, 32, 35, 79-80; autosled, 24; balloon, 66-67; dogsled, 24, 32; foot, 32, 53, 71, 81; horse, 32, 103; speedboat, 32, 35, 42, 103, 104; sulky, 24, 50; swimming, 32; turtle, 35 Railroads, 36, 58; elevated, 24-25; and locomotives, 6, 51, 68-69; monorail, 5; safety on, 81 Rainbow Bridge, Utah, 40 Rainier, Mount, Wash., 26, 76 Ralston, Samuel M., 5 Ranches, 8, 37 Rasmussen, A. B., 67 Ray, Ted, 32 Reagan, Frank, 81 Recreation. See specific activities; Games; Hobbies; Sports Reese, Peewee, 70 Rentshler, Gordon, 52 Republican Party, 76, 106 Resorts, 21, 76 Reuther, Walter, 106 Revolutionary War, monuments and sites, 5, 24, 26, 30 Rhode Island, 29, 76 Rice, Grantland, 80-81 Richardson, L. B., 67 Richmond, Va., 26, 31 Rickenbacker, Edward V., 12, 80, 97 Riley, James Whitcomb, 6 Rio de Janeiro, Brazil, 40 Rivera, Diego, 47 Rivers, 31. See also names of individual Roads, 10-11, 38; building of, 6, 21, 77-78 Robinson Machine Co., 101 Robot bombs, 104-105 Rochester, N.Y., 76 Rocky Mountains, 20, 23, 28. See also individual States, sub-ranges, and peaks Rodeos, 8, 20-21, 76 Rogers, Will, 6, 45, 52, 75, 104 "Romeo and Juliet," 38 Rooney, Mickey, 52-53, 104 Roosevelt, Franklin D., 5, 105 Roosevelt, Theodore, 6 Rosendahl, Charles E., 67 Rosenwald, Julius, 52 Ross, Alex, 32

Rouge River, Mich., 45
Rowe, Schoolboy, 104
Rowland, Earl, 67
Royal Gorge, Colo., 23, 75
Rubber plantations: of Brazil, 58, 68, 90; of Ceylon, 19; of Malaya, 63
Rubber processing, 18, 19, 58, 89; testing, 90
Rubio, Pascual Ortiz, 91
Ruffa, Tony, 81
Ruins: Aztec, 29, 40; at Fort Bliss, 29; of Fort Ticonderoga, 30; Indian, 40; Spanish, 20-21, 23, 26, 29-30

Ross. W. B., 75

Russell, Tony, 81 Saarinen, Eliel, 63 Sacramento, Calif., 9, 22, 75 Safety, 11, 15, 38-39, 80-81 St. Augustine, Fla., 23, 29-30 St. Lawrence River, 20, 28 St. Louis, Mo., 74, 76 St. Paul, Minn., 24, 76 Salem, Oreg., 76 Salt industry, 15 Salt Lake City, Utah, 76 San Antonio, Tex., 26 San Diego, Calif., 22, 72, 76 San Francisco, Calif., 22, 75 Sangre de Cristo Range, 20 Santa Catalina Island, 22 Santa Fe, N. Mex., 24, 30 Santiago, Chile, 62 São Paulo, Brazil, 62 Sawmills, 11, 14, 18, 50-51, 58, 68 Schelde River, Belgium, 62 Schlee, Edward F., 67 Schlosser, Arthur G., 67 Schmino, Angelo, 80 Schroeder, R. W., 67 Schultz, Glen, 80 Schwab, Charles M., 52 Scotland: Ben Nevis Mountain, 62, 75; Loch Lomond, 104 Seattle, Wash., 26, 76; Ford Branch, 61 Seminole Indians, Fla., 23 "Servant of Mankind," 103 Shanghai, China, 62 Shasta, Mount, Calif., 75 Shaw, Wilbur, 79 Sheep shearing, 15 Sheridan, Sarah M., 52 Ships, 12, 58; construction of, 58, 69, 94; ice-

bound, 6; launchings of, 12, 69; mainte-

nance of, 96; maneuvers of, 12, 94; scrap-

94, 96; freighters, 6, 58, 61, 69, 88; liners,

69, 104; mosquito boats, 94; submarine

chasers (eagle boats), 58, 94; submarines,

94, 96, 103; tugs, 69, 89; troop carriers, 104;

yachts, 69

ping of, 89; submarine warfare and, 103 Ship types: aircraft carriers, 96; battleships, Shipyards, 12, 33, 58, 69 Sialia (vacht), 45, 46, 69 Sierra Madre Range, Calif., 21 Sierra Nevada Mountains, Calif., 22 Sikorsky, Igor, 67 Silver Springs, Fla., 23 Silzer, George S., 75 Singapore, Malaya, 63 Skimobile, 32 Sloan, M. S., 52 Smith, Alfred E., 104 Smith, Sidney, 76 Smoot, Reed, 76 Soo Canals, Mich., 20, 42 Sorensen, Charles E., 71, 88, 91 Sorghum mill, 75 Sousa, John Philip, 12 South Africa, 64 South America, 40. See also individual coun-South Dakota, 25, 76 Soybean processing, 88 Spain, 64, 74 Spencer, M. Lyle, 76 Sphinx, Egypt, 62 Spirit of St. Louis, 67, 84 Spokane, Wash., 26 Sports, 6, 21, 24, 27, 28, 32, 35, 41-42, 50, 53, 70, 71, 75, 76, 79, 80-81, 103-104, 106. See also individual sport Sports equipment, 19 Stagecoach, 51 Stalin, Joseph, 106 Stapp, Babe, 80 Stassen, Harold E., 40 Stauffer, John, 66 Steel manufacturing, 14, 19, 58, 85-86, 88, 89-90, 101, 107 Steinmetz, Charles, 103 Sterling, Ross S., 76 Stevens, Vern, 70 Stockholm, Sweden, 64 Stockyards, Chicago, 8, 14 Stone, Dorothy, 75 Stone, Fred, 75 Stone Mountain, Ga., 15 Stout, William B., 66, 84 Strikes, 71-72, 106 Stubblefield, Stubby, 79 Submarine warfare, 103 Sugar: cane, 9-10, 15; maple, 10, 15 Sullivan, J. J., 97 Superior, Lake, 20 Surfboard riding, 27, 32 Swanson, Gloria, 35 Sweden, 64 Sydney, Australia, 62 Sylvan Lake, S. Dak., 76

Tacoma, Wash., 26 Taggart, Thomas, 5 Tapajos River, Brazil, 68 Tebbetts, Bernie, 41 Tennessee, 25, 76 Tennessee River, 76 Testing: of automobiles, 90-91; of World War I armaments, 93-94; of World War II armaments, 94-97, 104-105 Texas, 8, 25-26, 29, 76 Therapy: occupational, 10, 12-13; physical, 12-13 Thomas, Rolland J., 97 Thornycroft, Sir J., 105 Thousand Islands, St. Lawrence River, 28 Thunder Bay, Mich., 40 Tires, 19, 89, 91 Titicaca, Lake, South America, 79 Tobacco drying, 15 Tokyo, Japan, 29, 63 Toledo, Ohio, 25; Museum of Art, 6 Tools, farm and garden, 101 Tractors, of Ford Motor Co. of Minneapolis, Minn., 101 Tractors, Fordson, 1917-48, 77-78, 93; manufacturing, 58, 84, 86, 92 Tracy, Spencer, 52 Traffic, 39, 42; safety in, 11, 39, 80 Training: driver, 80; industrial, 24; military, 6, 12, 66, 96, 105; police, 39; of foremen, 91; of the blind, 37; of the handicapped, 91; of workers, 91 Transportation, history of, 10-11, 72 Transportation systems: air, 58, 66-67; bus, 77; railroad, 58, 68-69 Trenton, N.J., 75 Tresh, Mike, 70 Trout, Dizzy, 41, 70 Trucks, Ford, 1916-50: from Model-T's, 77, 101: manufacturing of, 58, 77, 84-85 Trucks, Packard, 93 Trucks, Virgil, 70 Truman, Harry S., 41, 106 Tucson, Ariz., 21 Tumulty, Joseph P., 5 Turner, Dan, 75 Twentieth Century-Fox Film Corp., 102

Union of South Africa, 64
United Automobile Workers, 71-72, 106
United Service Organization, 94
U.S. Government, 12-13, 27. See also specific agency names and Washington, D.C.
Universal Film Manufacturing Co., Inc., 102
Upholstery, 61, 90-92
Uruguay, 64
Utah, 20, 39, 40, 76, 107-108

Valley Forge, Pa., 30 Vardon, Harry, 32 Variety Artists' Relief Committee, 38 Vermont, 76

Veterans: Civil War, 31; World War I, 10, 12-13

Veterans of Foreign Wars Buddy Poppy Camp, 41

Vicksburg, Miss., 30-31; National Military Park, 76

Victoria, Mount, Canada, 28

Village Industries, 47, 57, 75, 90, 92

Villages, South American, 40

Virginia, 5, 8, 26, 27, 30-31

Volcano. See Kilauea Crater

Volselle, Bill, 41

Voting, 39

Wakefield, Dick, 41 Wakefield, Lord, 105 Wales, 62 Walker, Jimmy, 76 Walker, Mary, 6 War of 1812, battle site, 76 Warren, Kenneth, 67 Washington, D.C., 5, 6, 15, 27, 30-31, 57 Washington, George, 12, 30 Washington (State), 26, 61, 76 Watches, 16 Water power, 33 Water supply, city, 33 Water wheel, 63 Webster, Noah, House in Greenfield Village, Wellington, New Zealand, 64 Wells, Linton, 80 West Virginia, 68, 76 Whalen, Grover A., 104 Wheelmaking, 19-20, 63 White, Jo Jo, 104 Whitney, W. R., 103 Wilkins, Sir George H., 67 Willamette River, Oreg., 25

Williams, Charles D., Jr., 67 Wilson, Woodrow, 5, 12 Wilson, Mrs. Woodrow, 5 Windmill, 63 Windsor, Ontario, Canada, 62 Wisconsin, 76 Wood, Gar, 32, 35, 103 Woolen mills, 15, 91-92 Working conditions, industrial, 11 World's Fairs: Chicago, 72-73; New York, 74, 104; San Francisco, 6 World War I: airplane manufacturing, 12. 58, 93; American Red Cross, 10; Armistice celebrations, 5, 11; awards, 6; Jitney Submarine, 105; Liberty Loans, 6, 12, 34; submarine chasers (Eagle Boats), 58, 94; submarine warfare, 103; tanks, 6, 12, 93-94; training, 6, 12; troops, 6; trucks, 93-94; veterans, rehabilitation of, 12-13; war gardens, 6 World War II: airplane manufacturing, 94, 96-97, 105; antiaircraft guns, 94; Axis leaders, 42; blood donors, 94; food distribution program in Great Britain, 107; gliders, 95;

104-105; Russian leaders and officers, 95, 106; training, 96-97; troop carriers, 104; United Service Organization, 94; vehicles, 94-95; women, 96, 97
Wright Homestead and Cycle Shop, Greenfield Village, 53
Wright, Orville, 53

handgrenades, 97; housing, 105; naval bat-

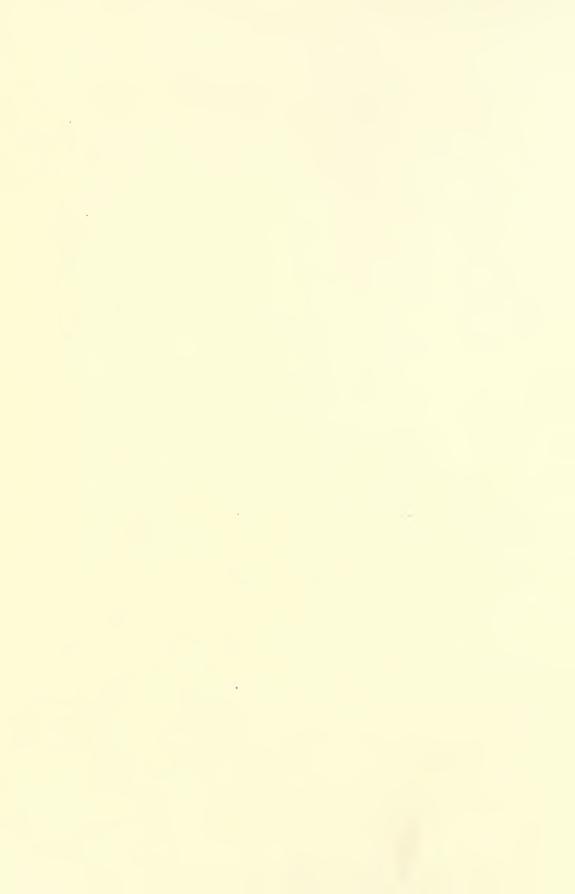
tles and maneuvers, 94, 96; robot bombs,

Yokohama, Japan, 63 Yorkshire, England, 62 Yost, Fielding H., 52 Youngblood, Bernard J., 103 Ypsilanti, Mich., 34

Wyoming, 20, 26-27, 40, 75, 108

Zinc, 33





for the period 1914 to the early 1940's stems from its very broad coverage of the American scene, including cities, parks and recreational areas, agriculture, industry, sports, important individuals, and news events. The evolution of all industrial processes related to automobile manufacturing are fully documented.

Illustrations used in this *Guide* were chosen as representative of the subject matter in the collection and as indicative of the quality and physical condition of the film when brought into the National Archives. Although most of the film is in an excellent state of preservation and of good photographic quality, some has been damaged by excessive use or by the deterioration of the highly unstable nitrate base stock on which the early films were made. All of the film has now been copied on a permanent base, however, and its preservation is assured.

# AUDIO VISUAL MATERIALS IN THE NATIONAL ARCHIVES

The holdings of the National Archives contain a large quantity of audio visual materials, including some 35,000 sound recordings, 4.5 million still picture items, and 47,000 reels of motion picture film.

Most of the motion pictures were created by some seventy-five Federal agencies. Those received by the National Archives as gifts from both private and commercial sources are numerous, and the total holdings provide an almost limitless variety of subject matter. The collections, dating from 1894 to the present, portray a wide variety of human activities and natural phenomena and were taken in every State of the Nation, most major cities, and nearly every country of the world.

Film in the collections may be viewed at the National Archives Building, and copies may be purchased at reasonable prices.